1044b UIC - EAST POPLAR OIL FIELD
ENFORCEMENT CASE SDWA 1431
Folder ID: 13623 1977 Privileged

Release in full

[redacted]

HISTORY

PERMIT
APPLICATIONS

#517 Huber Geological

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 14, 1955

Following is a ~~notice of intention to do work~~ / report of work done on land ~~owned~~ / leased described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NENE Sec 10 (m. sec.) 28 North (Township) 51 East (Range) M.P.M. (Meridian)

The well is located 660 ft. from {N / ~~S~~} line and 660 ft. from {E / ~~W~~} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY ~~DETAILS OF PLAN OF WORK~~ READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Unable to pull tubing out of Baker Model D packer. Backed tubing off at safety joint. Fished tubing, broke off in top of packer. Squeezed perforations 5624-28 and 5641-45 with 25 sax slo-set cement, max pressure 4300#. Drilled up cement retainer and cement. Milled up top part of packer. Pushed packer to bottom. Top of packer at 5708'. Perforated casing from 5771 to 5791 with 4 jets per foot. Hung tubing at 5795' with 7' perforations on bottom. Acidized with 1000 gallons Dowell XFW acid. Formation broke down at 1400# — Max. pump pressure 1500# — Shut-in pressure 950#. Flowed well to pit, 70% oil 5-12-55. Connected to tanks 5-13-55. Produced bbls oil bbls water hrs on inch choke.

Approved subject to conditions on reverse of form

Date

By
Title
District Office Agent

Company C. C. Thomas

By Robert D Snyder

Title Petroleum Engineer

Address Billings Mont

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well	X	Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 1, 1962

Following is a {notice of intention to do work} on land {~~owned~~ leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 (C NE NE) 10 (m. sec.) 28N (Township) 51 E (Range) M.P.M. (Meridian)

The well is located 600 ft. from {N / ~~S~~} line and 660 ft. from {E / W} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease-boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK

RESULT

Enter well. Drill out CIBP a/5450'. Squeeze cement open Madison "A" zone perforations a/ 5431-35' and 5482-92'. Drill out CIBP a/5506'. DOC squeeze open Madison B-1 perforations a/5624-32'. Drill out old Model D packer a/5636', and CIBP a/5684'. Test open Madison "C" zone perforations a/5771-91'. Acid cleanout of these perforations may be necessary.

If unsuccessful in "C" zone, may log well with GR-Fuetron log, perforate and attempt completion in Madison B-1 zone between 5624', and 563[illegible]'. It is expected that acidizing of this interval will be necessary to completion.

Approved subject to conditions on reverse of form

Date.....

By.....
Title
District Office Agent

Company E.A. Polumbus Jr.

By Richard Gregory

Title Supt.

Address Box 591 Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	X
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 20, 1962, 19....

Following is a { ~~notice of intention to do work~~ / report of work done } on land { ~~owned~~ / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28 N (Township) 51 E (Range) MPM (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE Attached work report.

Approved subject to conditions on reverse of form

Date.....

By.....
Title
District Office Agent

Company E.A. Polumbus Jr.

By Richard Gregory

Title Supt.

Address Box 591 Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

GEOLOGICAL SURVEY
RECEIVED
JAN 24 1963
BILLINGS, MONTANA

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

Ref 9

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

January 20, 1963

Following is a {notice of intention to do work / report of work done} on land {owned / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28N (Township) 51E (Range) (PM) (Meridian)

The well is located 660 ft. from {N / S} line and 660 ft. from {E / W} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

12-19-62 to 12-23-62: Lane Wells ran G/R Nuetron Log on interval 4750' to 5794'. Lane Wells set Bridgeplug at 5690'. Dumped 1 sack cement on plug. PBTD 5680'. Ran Dowell Abrasajet & cut notch in casing at 5626' in Madison B-1 zone, using 2000 gal 3% acid as etching fluid, carrying 2000 lbs sand. Ran pump in well and finished rig work 12-23-62. Initial pumping production test 1-5-63 for 24 hrs indicated 43.30 bbls fluid, with 18.94 bbls salt water, 24.36 bbls oil. Pump testing continuing.

Approved subject to conditions on reverse of form

Date JAN 2 3 1963

By ORIGINAL SIGNED BY: R. M. Watkins, Petr. Engr.
Title
District Office Agent

Company E.A. Polumbus Jr.

By

Title Supt.

Address Box 591 Poplar, Montana

NOTE—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

APR 2 1965

OIL AND GAS CONSERVATION COMMISSION OF THE STATE OF MONTANA BILLINGS

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	X
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

....., 19.....

Following is a { [redacted] report of work done } on land { [redacted] leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 C NE NE 10 (m. sec.) 28 N (Township) 51 E (Range) MPM (Meridian)

The well is located 600 ft. from { N [redacted] } line and 660 ft. from { E [redacted] } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

RECEIVED
APR 2 1965
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY **DETAILS OF PLAN OF WORK** READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Well down 2-26-65 with suspected casing rupture. Freepoint indicator showed tubing stuck 2856 to 2890 feet. Washed over tubing to 2856. Backed off at 2845' (collar) and pulled upper tubing. Cut tubing @ 2907' with jet shot. Recovered tubing fish (2845-2907') after lengthy jarring. Swedged 5-1/2" casing and recovered remainder of tubing (2907-5632). Swedged 5-1/2 casing to 4-3/4". Set retrievable bridge plug at 4232' and cement retainer at 2655 feet. Squeezed 150 sks salt saturated PO_2 mix into ruptured zone 2856-2890' — holding 1000# pressure. Resqueezed with 25 sacks reg. cement with 25 gals Latex with packer at 2755 ft. Held pressure of 1400#. Drilled cement to 2956 and hit metal. Temporarily abandoned repair operation.

Workover covered period 3-12-65 to 3-23-65.

Approved subject to conditions on reverse of form

Date APR 5 1965

By ORIGINAL SIGNED BY: J. R. Hug, Supervisor Title

District Office Agent

Company E. A. POLUMBUS, JR.

By [signature]

Title Agent

Address 414 Patterson Building, Denver, Colorado

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	X
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

June 17, 19 65

Following is a { notice of intention to do work / report of work done } on land { owned / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 CNENE 10 (m. sec.) 28N (Township) 51E (Range) MPM (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

RECEIVED
SEP - 7 1965
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA - BILLINGS

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Drilled out cement w/4¼" bit. Found tight spots @2872-82, 2884-92, stopped drilling @2920. Ran 4 3/4" mill w/pilot H.t. metal @2853-66, 2872-90, 2920. Pressured to 800#. Set packer @2803 and swab. Pulled packer. Retreived Bridge plug from 4232. Pulled loose w/40,000 lbs. Drilled out shale in bottom of hole. Set packer @5595.24. Pressured casing to 300#. Swabbed; moved packer to 5618; tested w/50#. Hung well on beam. Tested to 300# and held.

Approved subject to conditions on reverse of form

Date SEP 7 - 1965

By ORIGINAL SIGNED BY:
J. R. Hug, Supervisor
Title

District Office Agent

Company E. A. Polumbus, Jr.

By [signature]

Title Agent

Address 414 Patterson Building

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
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BILLINGS OR SHELBY

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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

July 15, 1966

Following is a { [redacted] / report of work done } on land { [redacted] / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 8 C NE NE 10 28N 51E
(m. sec.) (Township) (Range) (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

RECEIVED
JUL 18
OIL AND GAS
OF THE STATE OF MONTANA

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

July 18, 1966 Opened Annulus & pumped 250 Gallons Dowell XFW regular 15% acid down hole and followed with 17 Bbls formation water to fill tubing. Connected line to annulus & took 8 Bbls. water to fill annulus. Started pumps and at 350# on tubing were gettingpressure on annulus, indicating breakdown of packer. Stopped pumps. Closed valves on annulus & tubing & let set for ½Hr. Opened valves & had a suck on both tubing and annulus, indicating formation taking fluid. Left tubing & casing valved open total of 1½ hrs to equalize fluid in tubing & casing. Run swab & tagged fluid 200' down, indicating formation swallowed approx 6-7 Bbls fluid. Assumed it took the acid. Ran rods & pump.

Approved subject to conditions on reverse of form

Date JUL 18 1966

By ORIGINAL COPY SIGNED
By: Gordon D. Lanouette
District Office Agent
Title

Company B.A. Polumbus, Jr

By W. A. Polumbus

Title Agent

Address 114 N. Hesser Billings

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

7-20-66 Copy to [illegible]

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	X	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 5, 1969

Following is a {notice of intention to do work / ~~report of work done~~} on land {owned - / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NENE (m. sec.) Section 10, T28N, R51E (Township) (Range) (Meridian)

The well is located 660 ft. from {N / S} line and 660 ft. from {E / W} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

1. Pull tubing, Rods, Pump
2. Set retreivable bridge plug at 4975' and Packer at 4805
3. Perf. w/2 holes @ 4870' (bottom of Heath)
4. If perf yield water perform DOC squeeze.
5. Perf 4846 - 4874 (28) w/1 hole per foot (Heath)
6. Wash w/250 gal. of acid
7. Frac w/15,000 gallons of water and 7500 # of 20-40 sand & 2000 # of 10/20 sand
8. Run tubing, rods & pump

Note: Charles zone will be temporarily SI while testing Heath.

RECEIVED
MAY 19
OIL & GAS CONS. COMM.
STATE OF MONT.
BILLINGS

Approved subject to conditions on reverse of form

Date MAY 7 - 1969

By ORIGINAL SIGNED BY: J. R. Hug, Supervisor
District Office Agent Title

Company E. A. Polumbus, Jr.

By D. J. Law

Title V. Pres. Exploitation

Address 220 C. A. Johnson Bldg.
Denver, Colorado

COMMISSION USE ONLY
API WELL NUMBER
25
STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

Form No. 2

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201, 202, 213,
216, 219, 233.

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	✓
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 28, 19 69

Following is a {~~notice of intention to do work~~ / report of work done} on land {~~owned~~ / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NE NE Section 10 (m. sec.) 28N (Township) 51E (Range) (Meridian)

The well is located 660 ft. from {N / ~~S~~} line and 660 ft. from {E / ~~W~~} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE ATTACHED FOR DETAILS OF RECOMPLETION FROM CHARLES FORMATION TO HEATH FORMATION

Approved subject to conditions on reverse of form

Date

By
Title
District Office Agent

Company E. A. Palumbus, Jr.

By

Title Vice President - Exploitation

Address 220 C. A. Johnson Building
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

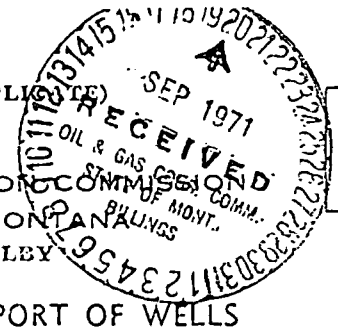
WORKOVER
E. A. POLUMBUS, JR. - HUBER NO. 3 WELL
EAST POPLAR FIELD
ROOSEVELT COUNTY, MONTANA

5/8/69		Move in Prather Well Service, pull rods and pump.
5/9/69		Pull tubing and packer. Perforate w/ 2 holes at 4870' for water test of Heath.
5/10/69		Set retrievable bridge plug at 5020', began swabbing.
5/11/69		Swab 15-20 barrels per hour, 80% water.
5/12/69		Squeezed perforations at 4870' w/ 100 sacks (50 sacks 50-50 poz and 50 sacks latex) Maximum pressure 2800 psi, final squeeze pressure 2500 psi.
5/13/69	to	Drilled out cement, perforated Heath from 4848-4874' w/ 25 holes.
5/14/69		Ran swab found no fluid entry.
5/15/69		Acidized w/ 250 gallon 15% HCl. Swabbed dry.
5/16/69		Acidized w/ 500 gallon 15% HCl, followed by 200 barrels treated crude. Maximum pressure 2800 psi. Swabbing back fluid - 20% oil and 80% water at low rate.
5/17/69		Frac w/ 7000 lbs. 20-40 sd and 2500 lbs. 10-20 sd. in 400 barrels of water Maximum pressure 3800 psi.
5/18/69		Pull tubing and packer
5/19/69		Ran tubing, rods and pump, started pumping.
5/20/69		Pumping mostly water, about 10% oil.
5/21/69	to	Testing on pump.
5/27/69		Production rate 150 BOPD and 231 BWPD.

Note: The bridge plug has been left in the hole temporarily to isolate the Charles.

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY



NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of ~~Redrilling or~~ Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

September 16, 1971

Following is a { ~~notice of intention to do work~~ / report of work done } on land { ~~owned~~ / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) E. Poplar (Field)

Well No. 3 NE NE (m. sec.) Section 10 (Township) 28N (Range) 51E (Meridian) M.P.M.

The well is located 660 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

On morning of August 1, 1971, this Heath well was flowing water and no oil through the tubing at a rate of about 130 bbls/hr. Well would also flow water at a high rate from the 2⅜" x 5½" annulus. Shut in surface pressure was 120 psi. At that time the source of the water flow was not known. The repair work performed on the well is presented on the following pages.

Approved subject to conditions on reverse of form

Date SEP 21 1971

ORIGINAL SIGNED BY
J. R. Irby, Supervisor
By ..... Title

District Office Agent

Company The Polumbus Corporation

By .....

Title Vice-President

Address 1000 Capitol Life Building
Denver, Colorado 80203

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

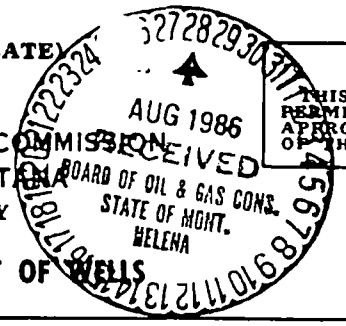
OVER

Huber # 3

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY



NOTICE
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
Notice of Change of Operator	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

August 8, 1986

Following is a {notice of intention ~~to do work~~ / ~~report of work done~~} on land {~~owned~~ / leased} described as follows:

LEASE HUBER

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28N (Township) 51E (Range) Principal (Meridian)

The well is located 600 ft. from {~~N~~ / ~~S~~} line and 660 ft. from {~~E~~ / ~~W~~} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is .....

READ CAREFULLY **DETAILS OF PLAN OF WORK** READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Notification of sale of above described property, effective 7-1-86, resulting in a change of operator.

Certified by: GRACE PETROLEUM CORPORATION

By: Kay Tully
Title: Supervisor
Production Accounting

Approved subject to conditions on reverse of form

Date SEP 15 1986 ORIGINAL SIGNED BY:

By Dee Rickman, Executive Secretary
District Office Agent Title

Company MURPHY OIL, U.S.A., INC.

By [signature]

Title Manager of Production Department

Address 200 Peach St. El Dorado, ARK 71730

COMMISSION USE ONLY
API WELL NUMBER
25 085 05D146
STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

Form 20
Rev. 8-92

Submit In Quadruplicate To:

Montana Board of Oil and Gas Conservation

1520 East Sixth Avenue
Helena, Montana 59620-2301

ARM 36.22.307
ARM 36.22.605
ARM 36.22.1308

Notice of Intent to Change Operator

The undersigned Transferor hereby notifies the Board of Oil and Gas Conservation of its intention to transfer ownership and/or operation of the following wells to the undersigned Transferee:

Lease Name: Huber

Lease type: (Private, State, Federal, Indian) Private

County: Roosevelt

Field name: East Poplar

Description of wells: (Include official well name and number as reflected on Board of Oil & Gas Conservation records, API well number, and exact location of the well including quarter-quarter section, footage measurements, Section, Township, and Range.)

Huber No. 1, Huber No. 2, Huber No. 3, Huber No. 4-A, and Huber No. 5-D
See attached sheet for information
Effective change of owner/operator from Murphy Exploration and Production Company to

Transferor's Statement:
I hereby designate the Transferee named herein as the owner and/or operator of record of the above described well(s). I acknowledge that the Transferor continues to be responsible for said well(s) and all associated equipment and facilities until such time as this transfer is approved by of the Montana Board of Oil and Gas Conservation. I certify that the information contained herein is true and correct:

Company: Murphy EXPRO
Street Address: 131 South Robertson Street
P.O. Box: Box 61780
City, State, ZIP: New Orleans, LA 70161-9969
Signed:
Print Name: Sidney W. Campbell
Title: Manager Onshore Operations
Telephone: (504) 561-2594

Transferee's Statement:
I hereby accept the designation of operator/owner for the above described well(s). I understand that this transfer will not be approved until the Transferee has complied with the Board's bonding requirements. I acknowledge that under Section 82-11-101 MCA, the Transferee herein is responsible for the costs of proper plugging and restoration of the surface of the well(s) described above. I certify that the information contained herein is true and correct:

Company:
Street Address:
P.O. Box:
City, State, ZIP:
Signed:
Print Name:
Title:
Telephone: ( )

BOARD USE ONLY

Approved _____ Date

_____ Name _____ Title

Oper. No. _____ Bond No. _____

Field Office Review	Date	Initial
Inspection		
Records Review		
Operations		

Oper. No. _____ Bond No. _____

GEOLOGICAL DATA

#517 Huber Geological

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 14, 19 55

Following is a {~~notice of intention to do work~~ / report of work done} on land {~~contract~~ / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NENE Sec 10 (m. sec.) 28 North (Township) 61 East (Range) M.P.M. (Meridian)

The well is located 660 ft. from {N / ~~S~~} line and 660 ft. from {E / ~~W~~} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — ~~DETAILS OF PLAN OF WORK~~ — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Unable to pull tubing out of Baker Model D packer. Backed tubing off at safety joint.
Fished tubing, broke off in top of packer. Squeezed perforations 5624-28 and 5641-45 with 25 sax slo-set cement, max pressure 4300#. Drilled up cement retainer and cement. Milled up top part of packer. Pushed packer to bottom. Top of packer at 5708'. Perforated casing from 5771 to 5791 with 4 jets per foot. Hung tubing at 5795' with 7' perforations on bottom. Acidized with 1000 gallons Dowell XFW acid. Formation broke down at 1400#— Max. pump pressure 1500# - Shut-in pressure 950#. Flowed well to pit, 70% oil 5-12-55. Connected to tanks 5-13-55. Produced bbls oil bbls water hrs on inch choke.

Approved subject to conditions on reverse of form

Date

By
Title
District Office Agent

Company C. C. Hamon
By Robert D. Snyder
Title Petroleum Engineer
Address Billings Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION

OF THE STATE OF MONTANA

BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well	X	Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 1, 1962

Following is a {notice of intention to do work} on land {~~owned~~ leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 (C NE NE) 10 (m. sec.) 28N (Township) 51 E (Range) M.P.M. (Meridian)

The well is located 600 ft. from {N S} line and 660 ft. from {E W} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK

RESULT

Enter well. Drill out CIBP a/5450'. Squeeze cement open Madison "A" zone perforations a/ 5431-35' and 5482-92'. Drill out CIBP a/5506'. DOC squeeze open Madison B-1 perforations a/5624-32'. Drill out old Model D packer a/5636', and CIBP a/5684'. Test open Madison "C" zone perforations a/5771-91'. Acid cleanout of these perforations may be necessary.

If unsuccessful in "C" zone, may log well with GR-Fuetron log, perforate and attempt completion in Madison B-1 zone between 5624', and 563[illegible]'. It is expected that acidizing of this interval will be necessary to completion.

Approved subject to conditions on reverse of form

Date.....

By.....
Title
District Office Agent

Company E.A. Polumbus Jr.

By Richard Gregory

Title Supt.

Address Box 591 Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	X
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

November 20, 1962, 19....

Following is a { ~~notice of intention to do work~~ / report of work done } on land { ~~owned~~ / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28 N (Township) 51 E (Range) MPM (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE Attached work report.

Approved subject to conditions on reverse of form

Date.....

By.....
Title
District Office Agent

Company E.A. Polumbus Jr.

By Richard Gregory

Title Supt.

Address Box 591 Poplar, Montana

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

GEOLOGICAL SURVEY
RECEIVED
JAN 24 1963
BILLINGS, MONTANA

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

Ref. 9

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

January 20, 1963

Following is a {notice of intention to do work / ~~report of work done~~} on land {~~owned~~ / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28N (Township) 51E (Range) MPM (Meridian)

The well is located ~~660~~ ft. from {~~N~~ / ~~S~~} line and 660 ft. from {~~E~~ / ~~W~~} line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

12-19-62 to 12-23-62: Lane Wells ran G/R Nuetron Log on interval 4750' to 5794'. Lane Wells set Bridgeplug at 5690'. Dumped 1 sack cement on plug. PBTD 5680'. Ran Dowell Abrasajet & cut notch in casing at 5626' in Madison B-1 zone, using 2000 gal 3% acid as etching fluid, carrying 2000 lbs sand. Ran pump in well and finished rig work 12-23-62. Initial pumping production test 1-5-63 for 24 hrs indicated 43.30 bbls fluid, with 18.94 bbls salt water, 24.36 bbls oil. Pump testing continuing.

Approved subject to conditions on reverse of form

Date JAN 2 3 1963

By ORIGINAL SIGNED BY: R. N. Watkins, Petr. Engr.
Title
District Office Agent

Company E.A. Polumbus Jr.

By

Title Supt.

Address Box 597 Poplar, Montana

NOTE—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

APR 2 1965
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA BILLINGS

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	X
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

....., 19.....

Following is a { ~~Notice of Intention~~ / report of work done } on land { ~~private~~ / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 C NE NE 10 (m. sec.) 28 N (Township) 51 E (Range) MPM (Meridian)

The well is located 600 ft. from { N / ~~S~~ } line and 660 ft. from { E / ~~W~~ } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

RECEIVED
APR 2 1965
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA BILLINGS

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings, indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Well down 2-26-65 with suspected casing rupture. Freepoint indicator showed tubing stuck 2856 to 2890 feet. Washed over tubing to 2856. Backed off at 2845' (collar) and pulled upper tubing. Cut tubing @ 2907' with jet shot. Recovered tubing fish (2845-2907') after lengthy jarring. Swedged 5-1/2" casing and recovered remainder of tubing (2907-5632). Swedged 5-1/2 casing to 4-3/4". Set retrievable bridge plug at 4232' and cement retainer at 2655 feet. Squeezed 150 sks salt saturated PO_2 mix into ruptured zone 2856-2890' - holding 1000# pressure. Resqueezed with 25 sacks reg. cement with 25 gals Latex with packer at 2755 ft. Held pressure of 1400#. Drilled cement to 2956 and hit metal. Temporarily abandoned repair operation.

Workover covered period 3-12-65 to 3-23-65.

Approved subject to conditions on reverse of form

Date APR 5 1965

By ORIGINAL SIGNED BY: J. R. Hug, Supervisor Title

District Office Agent

Company E. A. POLUMBUS, JR.

By [signature]

Title Agent

Address 414 Patterson Building
Denver, Colorado

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)

TO

OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
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SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	X
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

June 17, 19 65

Following is a { notice of intention to do work / report of work done } on land { owned / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 CNENE 10 (m. sec.) 28N (Township) 51E (Range) MPM (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

RECEIVED
SEP - 7 1965
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA - BILLINGS

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Drilled out cement w/4¼" bit. Found tight spots @2872-82, 2884-92, stopped drilling @2920. Ran 4 3/4" mill w/pilot H.t. metal @2853-66, 2872-90, 2920. Pressured to 800#. Set packer @2803 and swab. Pulled packer. Retreived Bridge plug from 4232. Pulled loose w/40,000 lbs. Drilled out shale in bottom of hole. Set packer @5595.24. Pressured casing to 300#. Swabbed; moved packer to 5618; tested w/50#. Hung well on beam. Tested to 300# and held.

Approved subject to conditions on reverse of form

Date SEP 7 - 1965

By ORIGINAL SIGNED BY: J. R. Hug, Supervisor
Title
District Office Agent

Company E. A. Polumbus, Jr.

By E. A. Polumbus, Jr.

Title Agent

Address 414 Patterson Building

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

Form No. 2
GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

July 15, 1966

Following is a { [redacted] / report of work done } on land { [redacted] / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 8 C NE ¼ NE 10 (m. sec.) 28N (Township) 51E (Range) (Meridian)

The well is located 600 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2086

RECEIVED
JUL 18 1966
OIL & GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS

READ CAREFULLY — DETAILS OF PLAN OF WORK — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

July 15, 1966 Opened Annulus & pumped 250 Gallons Dowell XFW regular 15% acid down hole and followed with 17 Bbls formation water to fill tubing. Connected line to annulus & took 8 Bbls. water to fill annulus. Started pumps and at 350# on tubing were gettingpressure on annulus, indicating breakdown of packer. Stopped pumps. Closed valves on annulus & tubing & let set for ½hr. Opened valves & had a suck on both tubing and annulus, indicating formation taking fluid. Left tubing & casing valved open total of 1½ hrs to equalize fluid in tubing & casing. Run swab & tagged fluid 200' down, indicating formation swallowed approx 6-7 Bbls fluid. Assumed it took the acid. Ran rods & pump.

Approved subject to conditions on reverse of form

Date JUL 18 1966

By ORIGINAL COPY SIGNED
By: Gordon D. Lanouette
District Office Agent
Title

Company R.A. Polumbus, Jr

By [signature]

Title Agent

Address [illegible]

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

OVER

7-20-66 Copy to Harrison

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement	X	Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 5, 1969

Following is a {notice of intention to do work / ~~report of work done~~} on land {~~owned~~ - leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NENE (m. sec.) Section 10, T28N, R51E (Township) (Range) (Meridian)

The well is located 660 ft. from {N / S} line and 660 ft. from {E / W} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

1. Pull tubing, Rods, Pump
2. Set retreivable bridge plug at 4975' and Packer at 4805
3. Perf. w/2 holes @ 4870' (bottom of Heath)
4. If perf yield water perform DOC squeeze.
5. Perf 4846 - 4874 (28) w/1 hole per foot (Heath)
6. Wash w/250 gal. of acid
7. Frac w/15,000 gallons of water and 7500 # of 20-40 sand & 2000 # of 10/20 sand
8. Run tubing, rods & pump

Note: Charles zone will be temporarily SI while testing Heath.

RECEIVED
MAY 19
OIL & GAS CONS. COMM.
STATE OF MONT.
BILLINGS

Approved subject to conditions on reverse of form

Date MAY 7 - 1969

ORIGINAL SIGNED BY:
By J. R. Hug, Supervisor
District Office Agent Title

Company E. A. Polumbus, Jr.

By D. J. Low

Title V. Pres. Exploitation

Address 220 C. A. Johnson Bldg.
Denver, Colorado

COMMISSION USE ONLY
API WELL NUMBER
25
STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.)

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 28, 19 69

Following is a {~~notice of intention to do work~~ / report of work done} on land {~~owned~~ / leased} described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NE NE (m. sec.) Section 10 (Township) 28N (Range) 51E (Meridian)

The well is located 660 ft. from {N / ~~S~~} line and 660 ft. from {E / ~~W~~} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY **DETAILS OF PLAN OF WORK** READ CAREFULL

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jo cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE ATTACHED FOR DETAILS OF RECOMPLETION FROM CHARLES FORMATION TO HEATH FORMATION

Approved subject to conditions on reverse of form

Date

By
Title
District Office Agent

Company E. A. Polumbus, Jr.

By

Title Vice President - Exploitation

Address 220 C. A. Johnson Building
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

MCK

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

NOTICE
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	X
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	✓
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

May 28, 19 69

Following is a ~~notice of intention to do work~~ / report of work done on land ~~owned~~ / leased described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 NE NE Section 10 (m. sec.) 28N (Township) 51E (Range) (Meridian)

The well is located 660 ft. from ~~S~~ N line and 660 ft. from ~~W~~ E line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

SEE ATTACHED FOR DETAILS OF RECOMPLETION FROM CHARLES FORMATION TO HEATH FORMATION

Approved subject to conditions on reverse of form

Date

By
Title
District Office Agent

Company E. A. Polumbus, Jr.

By

Title Vice President - Exploitation

Address 220 C. A. Johnson Building
Denver, Colorado 80202

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL

OVER

WORKOVER
E. A. POLUMBUS, JR. - HUBER NO. 3 WELL
EAST POPLAR FIELD
ROOSEVELT COUNTY, MONTANA

5/8/69	Move in Prather Well Service, pull rods and pump.
5/9/69	Pull tubing and packer. Perforate w/ 2 holes at 4870' for water test of Heath.
5/10/69	Set retrievable bridge plug at 5020', began swabbing.
5/11/69	Swab 15-20 barrels per hour, 80% water.
5/12/69	Squeezed perforations at 4870' w/ 100 sacks (50 sacks 50-50 poz and 50 sacks latex) Maximum pressure 2800 psi, final squeeze pressure 2500 psi.
5/13/69 to 5/14/69	Drilled out cement, perforated Heath from 4848-4874' w/ 25 holes. Ran swab found no fluid entry.
5/15/69	Acidized w/ 250 gallon 15% HCl. Swabbed dry.
5/16/69	Acidized w/ 500 gallon 15% HCl, followed by 200 barrels treated crude. Maximum pressure 2800 psi. Swabbing back fluid - 20% oil and 80% water at low rate.
5/17/69	Frac w/ 7000 lbs. 20-40 sd and 2500 lbs. 10-20 sd. in 400 barrels of water Maximum pressure 3800 psi.
5/18/69	Pull tubing and packer
5/19/69	Ran tubing, rods and pump, started pumping.
5/20/69	Pumping mostly water, about 10% oil.
5/21/69 to 5/27/69	Testing on pump. Production rate 150 BOPD and 231 BWPD.

Note: The bridge plug has been left in the hole temporarily to isolate the Charles.

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

RECEIVED
SEP 1971
OIL & GAS CONSERVATION COMM.
STATE OF MONT.
BILLINGS

NOTICE!
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of ~~Redrilling or~~ Repair	X
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

September 16, 1971

Following is a { ~~notice of intention to do work~~ / report of work done } on land { ~~owned~~ / leased } described as follows:

LEASE Huber

MONTANA (State) Roosevelt (County) E. Poplar (Field)

Well No. 3 NE NE (m. sec.) Section 10 (Township) 28N (Range) 51E (Meridian) M.P.M.

The well is located 660 ft. from { N / S } line and 660 ft. from { E / W } line of Sec. 10

(Locate accurately on Plat on back of this form the well location, and show lease boundary.)

The elevation of the derrick floor above the sea level is 2096

READ CAREFULLY — **DETAILS OF PLAN OF WORK** — READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

On morning of August 1, 1971, this Heath well was flowing water and no oil through the tubing at a rate of about 130 bbls/hr. Well would also flow water at a high rate from the 2½" x 5½" annulus. Shut in surface pressure was 120 psi. At that time the source of the water flow was not known. The repair work performed on the well is presented on the following pages.

Approved subject to conditions on reverse of form

Date SEP 2 : 1971

ORIGINAL SIGNED BY
J. R. [illegible], Supervisor
By ..... Title

District Office Agent

Company The Polumbus Corporation

By S J Low

Title Vice-President

Address 1000 Capitol Life Building
Denver, Colorado 80203

NOTE:—Reports on this Form to be submitted to the District Agent for Approval in Quadruplicate.

VC

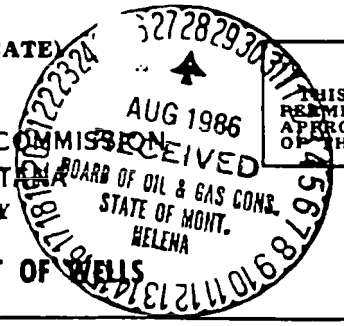
OVER

Huber #3

Form No. 2

GENERAL RULES
201, 202, 213,
216, 219, 233.1

(SUBMIT IN QUADRUPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY



NOTICE
THIS FORM BECOMES A PERMIT WHEN STAMPED APPROVED BY AN AGENT OF THE COMMISSION.

SUNDRY NOTICES AND REPORT OF WELLS

Notice of Intention to Drill		Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Shooting, Acidizing, Cementing	
Notice of Intention to Test Water Shut-off		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair Well		Subsequent Report of Redrilling or Repair	
Notice of Intention to Shoot, Acidize, or Cement		Subsequent Report of Abandonment	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well		Report of Fracturing	
Notice of Change of Operator	X		

(Indicate Above by Check Mark Nature of Report, Notice, or Other Data)

August 8, 1986

Following is a {notice of intention ~~to do work~~ / ~~report of work done~~} on land {~~owned~~ / leased} described as follows:

LEASE HUBER

MONTANA (State) Roosevelt (County) East Poplar (Field)

Well No. 3 10 (m. sec.) 28N (Township) 51E (Range) Principal (Meridian)

The well is located 600 ft. from {N / ~~S~~} line and 660 ft. from {E / ~~W~~} line of Sec. 10

LOCATE ACCURATELY ON PLAT ON BACK OF THIS FORM THE WELL LOCATION, AND SHOW LEASE BOUNDARY

The elevation of the derrick floor above the sea level is .....

READ CAREFULLY **DETAILS OF PLAN OF WORK** READ CAREFULLY

(State names of and expected depths to objective sands; show size, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work, particularly all details results Shooting, Acidizing, Fracturing.)

DETAILS OF WORK
RESULT

Notification of sale of above described property, effective 7-1-86, resulting in a change of operator.

Certified by: GRACE PETROLEUM CORPORATION

By: Kay Fully

Title: Supervisor
Production Accounting

Approved subject to conditions on reverse of form

Date SEP 15 1986 ORIGINAL SIGNED BY:

By Dee Rickman, Executive Secretary
District Office Agent Title

Company MURPHY OIL, U.S.A., INC.

By W. H. Simpson

Title Manager of Production Department

Address 200 Peach St. El Dorado, ARK 71730

COMMISSION USE ONLY
API WELL NUMBER
25 0815 05D146
STATE COUNTY WELL

NOTE:—Reports on this form to be submitted to the District Agent for Approval in Quadruplicate

WHEN USED AS PERMIT TO DRILL, THIS EXPIRES 90 DAYS FROM DATE OF APPROVAL.

OVER

Form 20
Rev. 8-92

Submit In Quadruplicate To:
Monta : Board of Oil and Gas C servation
1520 East Sixth Avenue
Helena, Montana 59620-2301

ARM 36.22.307
ARM 36.22.605
ARM 36.22.1308

Notice of Intent to Change Operator

The undersigned Transferor hereby notifies the Board of Oil and Gas Conservation of its intention to transfer ownership and/or operation of the following wells to the undersigned Transferee:

Lease Name: Huber

Lease type: (Private, State, Federal, Indian) Private

County: Roosevelt

Field name: East Poplar

Description of wells: (Include official well name and number as reflected on Board of Oil & Gas Conservation records, API well number, and exact location of the well including quarter-quarter section, footage measurements, Section, Township, and Range.)

Huber No. 1, Huber No. 2, Huber No. 3, Huber No. 4-A, and Huber No. 5-D
See attached sheet for information
Effective change of owner/operator from Murphy Exploration and Production Company to

Transferor's Statement:
I hereby designate the Transferee named herein as the owner and/or operator of record of the above described well(s). I acknowledge that the Transferor continues to be responsible for said well(s) and all associated equipment and facilities until such time as this transfer is approved by of the Montana Board of Oil and Gas Conservation. I certify that the information contained herein is true and correct:

Company: Murphy EXPRO
Street Address: 131 South Robertson Street
P.O. Box: Box 61780
City, State, ZIP: New Orleans, LA 70161-9969
Signed:
Print Name: Sidney W. Campbell
Title: Manager Onshore Operations
Telephone: (504) 561-2594

Transferee's Statement:
I hereby accept the designation of operator/owner for the above described well(s). I understand that this transfer will not be approved until the Transferee has complied with the Board's bonding requirements. I acknowledge that under Section 82-11-101 MCA, the Transferee herein is responsible for the costs of proper plugging and restoration of the surface of the well(s) described above. I certify that the information contained herein is true and correct:

Company:
Street Address:
P.O. Box:
City, State, ZIP:
Signed:
Print Name:
Title:
Telephone: ( )

BOARD USE ONLY

Approved _____ Date

_____ Name _____ Title

Oper. No. Bond No.

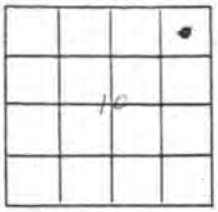
Field Office Review	Date	Initial
Inspection		
Records Review		
Operations		

Oper. No. Bond No.

[redacted]

4 pp.
1952.

LOCATE WELL CORRECTLY



Form No. 4
(Gen. Rule 206.3 & 221)

(SUBMIT IN TRIPLICATE)
TO
OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF MONTANA
BILLINGS OR SHELBY

LOG OF WELL

Revised --------

Company E.A. Polumbus Jr. Lease Huber Well No. 3

Address Box 591 Poplar, Montana Field (or Area) East Poplar

The well is located 600 ft. from (N) line and 660 ft. from (E) line of Sec. 10

Sec. 10 ; T. 28N ; R. 51E ; County Roosevelt ; Elevation 2096 KB (D.F., R.B. or G.L.)

Commenced drilling June 25, 1952; Completed August 17, 1952

The information given herewith is a complete and correct record of the well. The summary on this page is for the condition of the well at the above date.

Completed as Recompleted - oil well (oil well, gas well, dry hole)

Signed Richard Gregory

Title Supt.

Date January 28, 1963

IMPORTANT ZONES OF POROSITY

(Denote oil by O, gas by G, water by W; state formation if known)

From 5624 to 5633 Madison B-1
From 5642 to 5659 Madison B-2
From 5790 to 5814 Madison C-1
From ____ to ____
From ____ to ____
From ____ to ____
From ____ to ____
From ____ to ____

CASING RECORD

Size Casing	Weight Per Ft.	Grade	Thread	Casing Set	From	To	Sacks of Cement	Cut and Pulled from
10 3/4	45				0	1003	425	
5 1/2	14	J-55	8 rd		0	5809	400	

TUBING RECORD

Size Tubing	Weight Per Ft.	Grade	Thread	Amount	Perforations
2 7/8 EUE		J-55	8 rd	5550	

COMPLETION RECORD

Rotary tools were used from 0 to 5810
Cable tools were used from -- to --
Total depth 5810 ft.; Plugged back to ____ T.D.; Open hole from -- to --

PERFORATIONS			ACIDIZED, SHOT, SAND FRACED, CEMENTED			
Interval From	Interval To	Number and Size and Type	Interval From	Interval To	Amount of Material Used	Pressure
5771	5791	3"G jet 4/ft (old perforations)				
Lane Wells Bridgeplug at 5690' w/1 sk cement above plug						
5626	5626	Dowell Abrasajet Notch			2000 gal 3% acid w/2000 lb sand	

(If P&A show plugs above)

INITIAL PRODUCTION

Well is producing from Madison B-1 (pool) formation.

I. P. 34.76 barrels of oil per 24 hours pumping (pumping or flowing)

---- Mcf of gas per ---- hours.

18.5 barrels of water per 24 hours, or 43 % W.C.

(OVER)

INITIAL PRODUCTION—(Continued)

Initial 10-day average production _____ (bbl./day) (if taken)
Pressures (if measured): Tubing _____ psi flowing; _____ psi shut-in
Casing _____ psi flowing; _____ psi shut-in
Gravity 40 ° API (corrected to 60° F.)

DRILL STEM TESTS

D.S.T. No.	From	To	Tool Open (Min.)	Shut-in	F.P.	S.I.P.	Recovery	Cushion

LOGS RUN

Type	Intervals From	Intervals To
Electric - Schlumberger 1952	1000	5810
Lane Wells GR/Neutron	4750	5794

FORMATION RECORD

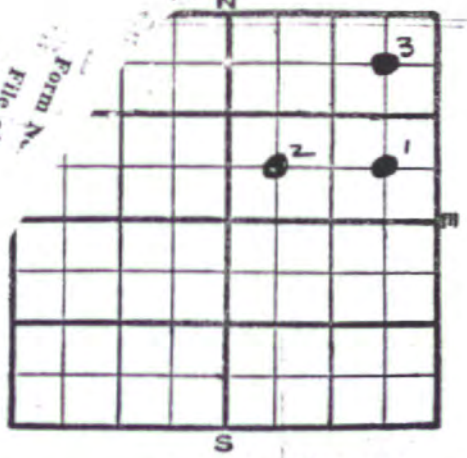
From	To	SAMPLE AND CORE NO. AND DESCRIPTION	Top of Formation
		Well was temporarily abandoned in December 1956 by former owner, C.C. Thomas.	
		Rework began November 1962. Flow tested Madison Group, which produced water only.	
		Completion attempted in Madison B-1, in December 1962, and is now producing from this interval.	
		Attached: Copies of Lane Wells GR/Neutron log; Dowell Abrasajet treatment report.	

January 23, 1963

Richard Gregory
Richard Gregory
For: E.A. Polumbus Jr.

This Log to Be Rendered in Four Copies

Form 297—5M—2-51



Lease Huber

BOARD OF RAILROAD COMMISSIONERS OF THE STATE OF MONTANA

Paul T. Smith, Chairman

Austin B. Middleton, Commissioner Leonard C. Young, Commissioner

OIL AND GAS WELL DIVISION

RECEIVED
SEP 1 1952
OIL CONSERVATION BOARD
OF RAILROAD COMMISSIONERS
BILLINGS

SEP

LOG OF OIL OR GAS WELL

Company C. C. Thomas Address Denver, Colorado

Lessor or Tract Huber Field Poplar State MONTANA

Well No. 3 Sec. 10 T. 28 N R. 51 E. Meridian County Roosevelt

Location 660 ft. { ~~N~~ / S. } of North Line and 660 ft. { W. / ~~E~~ } of East Line of Section Elevation 2096 (Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed

Title Petroleum Engineer

Date September 4, 1952 Address Billings, Montana

The summary on this page is for the condition of the well at above date.

Commenced drilling June 25, 19 52 Finished drilling August 17, 19 52

Oil or Gas Sands or Zones (Denote Gas by G)

No. 1, from 5624 to 5633

No. 2, from 5642 to 5659

No. 3, from 5790 to 5804

No. 4, from to

No. 5, from to

Important Water Sands

No. 1, from to

No. 2, from to

No. 3, from to

No. 4, from to

No. 5, from to

CASING RECORD

Size Casing	Weight per Foot	Threads Per Inch	Make	Amount	Kind of Shoe	Cut & Pulled From	Perforated From	Perforated To	Purpose
5½	14	8	J & L				5624	5628	4 jets/ft.
							5641	5645	"
Model D Production Packer at					5728				
					5777-81		5777	81	"
					5791-95		5791	95	"

CASING OR TOOLS LOST OR SIDETRACKED

From to Description

From to Description

From to Description

MUDDING AND CEMENTING RECORD

MARK

Casing Size	Where Set	Number Sacks of Cement	Methods Used	Mud Gravity	Amount of Mud Used
7"	3008	Lot			

PLUGS AND ADAPTERS

Heaving plug—Material.....Length.....Depth Set.....

Adapters—Material.....Size.....

SHOOTING RECORD

Size	Shell Used	Explosive Used	Quantity	Date	Depth Shot	Depth Cleaned Out
Acidized w/500 gal. 5624-28, 5641-45						

TOOLS USED

Rotary tools were used from 0 feet to 5810 feet, and from.....feet to.....feet

Cable tools were used from.....feet to.....feet, and from.....feet to.....feet

DATES

August 17, 19 52 Put to producing August 17, 1952 19

The production for the first 24 hours was 370 barrels of fluid of which 99.8 % was oil; 0.2 % emulsion;

.....% water; and.....% sediment.

If gas well, cu. ft. per 24 hours on 1/64" choke, 1600 flowing pressure Rock pressure, lbs. per sq. in.

Gallons gasoline per 1,000 cu. ft. of gas.....

EMPLOYEES

.....Driller .....Driller.

Best Driller Posey Driller.

HISTORY OF OIL OR GAS WELL

Core H. B. Wagner Drilling Co.

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "side-tracked" or left in the well, give size and location. If the well has been dynamited, give date, size, position, and number of shots. If plug or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

FORMATION RECORD

From	To	Total Feet	Formation
0	184	184	Shale and gravel
184	3210	3026	Shale
3210	3307	97	Shale and sand
3307	3433	26	Shale
3433	3470	37	Shale and sand
3470	3639	169	Shale
3639	3659	20	Sand
3659	4472	813	Shale
4472	4787	315	Shale and lime

SERVICE & TESTING

Huber No 3

Aug. 17, 1952: Perf. 5624-28 (B-1), 5641-45 (B-2), 5677-78 (Lower B-3), 5791-95 (C) w/4 jets/ft.
Acidized 5624-28 + 5641-45 w/500 gal.
Model "D" Packer set @ 5728

May '55 Set cmt. retainer @ 5610 + squeezed 5624-28 + 41-45 (B-1, B-2) w/25 sx.
Drilled out cmt, retainer, + Model "D" Packer
Perf. 5771-91 (Now open [illegible] 5771-95) (C)
Acidized w/1000 gals.
Est. prod. rate of 20 BO/Hr - 30% water.

Nov. '56: Squeezed 5771-95 (C) w/50 sx. (Lower B-3 & C)
Set C.I. Bridge Plug @ 5684 + dumped 1 sk cmt. on top PBD 5673'
Perf. 5643-55 w/4/ft. B-2
Set Model "D" @ 5636
Perf. 5624-32 w/4/ft. B-1
Acidized 5643-55 w/100 gal. retarded acid. B-2
Pumped 3% oil, 97% S.W. (B-2 zone)
1 week later: Pumping 3 BO + 297 BW/D

Dec. 56: Squeezed 5643-55 w/25 sx. Slo-set. B-2
Acidized 5624-32 w/2000 gals B-1
Pumped est 300 B.F/D - 15 B.O. + 285 B.W. -
1 week later: 3 BO + 295 BW/D
Plugged back to 5548 w/cmt.
Set Model K CIBP @ 5506. -
Perf. 5482-92 w/4/ft.
Acidized w/1000 gal
Flowed SW w/ scum of oil @ est rate of 100 B/D
Set CI BP @ 5450 -
Perf. 5431-35
Acidized 5431-35. w/500 gals.
Swabbed Salt Wtr w/ no trace of oil.
Shut Well In - Temp. abandoned.

G [illegible] Squeeze [illegible] 30' below [illegible] [illegible] Set D.P. [illegible] [illegible]

Thomas-Huber No. 3

No. 3 Huber

Date	Description of work
5-4-55	Getting ready location to move in Rig No. 1 WOWSCO. Digging holes for dead men.
5-5-55	Moved in rig. Started rigging up
5-6-55	Pulled and laid down rods. Rigged up to pull tubing. Pulled tubing Picked up HOMCO gas operated jars. Started in hole.
5-7-55	Caught fish with safety joint. Gas jars would not work. Measured tubing out hole - top fish at 5665'. Re-ran tubing with HOMCO tools, overshot, gas jars, and bumper sub. Caught fish, jars would now work. Pulled tubing and reran HOMCO tools with overshot and new set of gas jars. Caught fish, jared 5 times came loose, recovered 60.75' which included two joints tubing, locator sub and spacing nipple, broke off at top of first seal nipple inside packer. Top packer at 5726'.
5-8-55	Ran and set Baker cast iron Cement Retainer at 5010 on wire line by Lane-Wells. Squeezed perforations 5624-28 D-1 Zone and 5641-45 D-2 Zone thru cement retainer. Mixed 50 sax Halliburton Slo-Set cement. Pumped 85 sax into perforations, reversed out 25 sax. Max pressure 4300#. WOC 3:40 PM
5-9-55	WOC Dug rat hole, picked up kelley. Ran tubing in hole with 4 3/4" Williams rock bit No. 6060.
5-10-55	Started drilling on retainer at 8:00 AM. Drilled 3", not making any new hole. Trip to change bits. Ran Hughes type OW rock bit serial No. 12050
5-11-55	Drilled retainer and 30' cement. Drilled 6" on Model D Packer. Made trip replaced bit with HOMCO flat bottom 4 3/4" milling tool.
5-12-55	Milled 2 feet of Packer, pushed packer to bottom of hole. Pulled tubing out hole. Removed blow out preventers. Perforated 5771-5791' 4 jet shots per foot (80 shots) by McCullough. Hung tubing at 5706' with 7' perforations on bottom bull-nosed. Connected up Xmas tree. Displaced water with oil. Acidized with 1000 gallons Dowell XFW acid. Formation broke 1400#, max pump presure 1500#, standing shut-in pressure 950#. Flowed well to pits. Well making 70% oil. Shut in at 12:00 PM. Shut-in presure 850#.
5-13-55	Moved off rig. Well connected to flow line at 5:00 PM.
5-14-55	Choke plugged during night, unable to get good flow gage. Shut in at 8:00 AM to run bottom-hole presure tests for State of Montana. Well estimated to be capable of making 20 bbls oil per hour, 30% water. Water may increase or decrease as well is produced. Water does not taste salty.

Robert D. Snyder

Robert D. Snyder

ROBERT D. SNYDER
PETROLEUM ENGINEER
514 TREASURE STATE BUILDING
BILLINGS, MONTANA
TELEPHONE 9-6770

Nov 21, 1956

NOV 23 12

Mr. C. C. Thomas
1101 Mile High Center
Denver 2, Colorado

Dear Thomas:

Enclosed please find tickets from Dowell, Baker, and Lane Wells for the work done on # 3 Huber .
The recomplextion work on Huber # 3 by days is included for you files.
It seems that we should pump this well for approximately a month to see for sure what it will do from the B-2 zone before attempting to work on the B-1 zone.
We pulled the 2½" tubing from # 2 and put ½ of it in # 4 so that # 4 could be pumped with a larger pump.
The # 2 well is now completed with the C and B-1 and B-2 zones open for flow. It is recommended that if this well will not make the allowable that it be recompleted so that the C zone will flow up the casing and the B-1 and B-2 zones be pumped up the tubing. To do this we will have to set two Baker model D packers and run in a stinger with a cross over tool at the top packer. We have a pump on the tubing now so that we migl be able to pump the well if the flow is not too great from the C zone.

Very truly,

Robert D. Snyder

Recompletion Work Huber # 3

Date	Remarks
	Squeezed perforations 5771-91 with 50 sax DOC by Halliburton.
11-11-56	Rigged up pulling unit, Prather & Son, Pulled 2" tubing. Layed down 38 joints of tubing with bad threads and one jt 2½" tubing. Set Baker cast iron bridge plug at 5684 and dumped one sax cement on top of plug with Baker dump bailer by Lane Wells wire line. PBTD 5673'. Perforated B-2 Zone 5643-55 with 4 jets per foot, set madel D Baker packer at 5636', perforated B-1 zone 5624-32 with 4 jets per foot by Lane Wells.
11-12-56	Ran 2" tubing with Baker latch on sub with seal nipples and extension tube on botton. Waited on new tubing to reach packer, 2" pump 71 jts above packer.
11-13-56	Picked up 34 jts new tubing. Latched on packer at 5636' with 10' pup 2" on top. Unlatched and circulated acid down tubing. Latched on packer and acidized B-2 Zone 5643-55, with 1000 gallons Dowell Retarded acid, Max pressure 1900#. Flushed acid out tubing with 24 bbls oil. Well flowed back to pits. Stopped flowing after acid gas out at surface. Swabbed tubing , recovered acid water and very little oil est oil 1%. Shut well in over night.
11-14-56	Opened well to pits, would not flow. Swabbed well for one hour, Recovered oil and water est 2% oil. Dropped standing valve. Ran pump plunger on rods Waiting on pump unit
11-15-56	Installing pumping unit
11-16-56	Installing pumping unit
11-17-56	Started pumping well
11-18-56	Pumping est 3% oil, 97% salt water, Testing

Recompletion Work Huber # 3

Date	Remarks
11-19-56	Pumping est 2% oil and 98% water , 200 bbls total fluid per day
11-20-56	Pumping est 1% oil and 98% water, 200 bbls total fluid
11-21-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-22-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-23-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-24-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-25-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-26-56	Pumping est 1% oil and 99% water, 200 bbls total fluid
11-27-56 to 11-30-56	Pumping est 1% oil and 99% water, 200 bbls total fluid Rigged up pulling unit, Prather and Sons, Pulled rods did not recover standing valve. Ran rods screwed onto standing valve, pulled rods and recovered standing valve. Rigged up to pull tubing.
12—1-56	Unlatched from Baker Model D packer at 5636. Latched back onto packer, Squeezed perforations 5643-55 below Baker packer with 25 sax Slo-set cement by Halliburton. Pressure started to build up at end of displacing cement from mimium of 500# to 3000#. Stopped pumps. waited 5 min, pressure built on up to 3400#. Unlatched from packer, circulate out excess cement, recoverdd approx 2 Sax cement. WOC. PBTD 5636.
12—2-56	PBTD 5636. Hunk tubing at 5625', Baker latch on , seal nipples , and 10' extension tube on bottom. Acidized with 2000 gallons Dowell acid: 1000 gal Retarted (jel X-100) followed by 1000 gal XFW acid, displac acid with 20 bbls water, acidizing B-1 zone 5624-32. Max pressure 3000 final pressure 1100#, shut in pressure 500#. Well flowed back est 5 bb water flush and died. Swabbed water, acid gas and spent acid. Ran pump in hole. Started pumping water to pits. Released pulling Unit.
12—3-56	PBTD 5636. Pumping from B-1 Zone 5624-32. Est 5% Oil , 95% water, total fluid 300 bbls per 24 hrs, (15 bbls oil)

Recomplation Work Huber # 3

Date	Remarks
12-4-56 to 12-17-56	PBTD 5636 Pumping est 3 bbls oil and 295 bbls salt water per day, no increse in oil.
12-18-56	PBTD 5636. Rigged up pulling unit, Prather and Sons, Pulled rods and stamding valve. Circulated oil out of casing with fresh water. Plugged back with 15 sax Halliburton Slo-set cement. Circulated out one sax excess cement, WOC
12-19-56	PBTD 5506. Top cement plug at 5548, Set Baker Model K cast Iron Bridge Plug at 5506 on wire line by Lane Wells. Perforated $5\frac{1}{2}$" casing from 5482 to 5492 with 40 jets. Ran tubing to 5482.
12-20-56	PBTD 5506. Acidized with 1000 gal Dowell XFW acid thru perforations 5482-92. Well flowed back to pits. Flowed salt water with skum of oil at est rate of 100 bbls per day.
12-21-56	PBTD 5450. Pulled tubing, set Baker madel K cast iron Bridge Plug at 5450 on wire line by Lane Wells. Perforated $5\frac{1}{2}$" casing from 5431-35 with 4 jets per foot. Ran tubing in hole to 5432, Acidized perforations 5431-35 with 500 gallons Dowell XFW acid. Swabbed acid gas and water out of tubing. Shut in over night.
12-22-56	PBTD 5450. Swabbed salt water with no trace of oil. Shut well in, moved off pulling unit.

- Supplemantary Well History -

Report Of Workover - Huber lease - Well No. 3 - Nov. 1962

11-10-62

Rigged up Unit #8 from KBM Well Service, Glendive, Montana. Pulled well head. Tubing hanging in hole. Pulled 170 joints 2" tubing. Laid tubing down. Rigged up drilling equipment. Ran 2⅛" tubing with Reed 4¾" 20 bit. Found perfs at 5431-35' covered. Probably pipe scale, etc. Had trouble with thread leak on kelly joint. Found solid cement at 5443'.

11-11-62

Drilled out cement and CIBP at 5450-51'. Pushed to 5480'. Perfs at 5482-92' covered. Chunks of CIBP caused bit hanging and sticking. Found solid cement at 5495'. Cleaned out to 5498'. Perfs at 5482-92' fm Madison A zone flowing salt water at estimated rate of 80 to 120 BWPD. No trace oil.

Pulled tubing and bit. Ran tubing with Baker FB cementer. Set tool at 5419'. Rigged up Haliburton. Tested tubing to 2000#. Tested casing to 750#.

Haliburton did 100 sk, Halad 9 cement squeeze on perfs at 5431-35' and 5482-92'. Believed lower perfs more permeable and to take cement. Nice break in pressure at 2500# to indicate other perfs taking cement. Maximum sqeeze pressure 3700#. Total cement displacement into both sets perfs, 16.25 bbls. Washed over 1.75 bbls slurry.

11-12-62

Pulled tubing and Baker cementer. Ran tubing with Reed 4¾" bit. Cement top at 5420'. Drilled cement to to top of CIBP at 5506'. Tested casing to 1000#. No bleed off. Drilled up plug. Drilling on cement below plug.

11-13-62

Pulled tubing. Changed bits. Ran tubing & bit and drilled cement to top of Model D packer at 5636'. Pulled tubing and bit. Ran tubing with Baker FB cementer. Rigged up Haliburton. Set tool at 5580'. Haliburton tried break down on Madison B-1 perfs at 5624-32'. Breakdown at 2500#. Released tool, loaded hole with lease crude.

Huber No.3 Workover - cont.

11-13-62 - cont.

Set packer. Started pumping. Mixed 10 bbls lease crude with HiFlo. Ran 2 bbls diesel oil chaser. Mixed 50 sks regular cement with DOC 3 and diesel oil. Ran 2 bbls diesel chaser. Displaced with lease crude. Total slurry displacement 7 bbls. Pressure at end of displacement period, 4000#.

Released pressure. No bleed back. Repressure to 4000#. No bleed off. No bleed back afetr release.

Pulled tubing and packer. Ran tubing and Reed 4¾" bit. Circulated load oil back to tanks. Drilled up Model D at 5636' and cement below packer. Drilling on CIBP at 5684'.

11-15-62

Drilled plug up. Plug gave way, and well started flowing from Madison C zone perfs at 5771-91'. Started well test at 2:00 AM after closing well in with BOP.

Well flowing drilling fluid at estimated rate of 300 BPD.

Tested well 12 hrs. Well flowed alternate slugs of clear water, oil-water emulsion, and clear water with mixed slugs oil in gas pockets.

Ran tubing and bit to 5803' to check TD. Raised tubing and landed on tubing flange with bit at 5751'. Shut well in. Released rig.

Shut in tubing pressure 350#. Calculated bottom hole pressure, 2967#.

11-17, 18, 19-62

48 hr production test. 14/64 ths choke. Flowing pressure 125 #. Total fluid production 379.65 bbls. Water production 374.22 bbls. Oil 5.43 bbls.

Well status 11-20-62, flow testing continuing.

Richard Gregory
Richard Gregory
For: E.A. Polumbus Jr.

DEC 31 1962

Report Of Well Workover

Huber No.3 December 19,20,21,22,23, 1962

12-19-62

Rigged up Western Rig No.8. Stripped on BOP. Let well flow while pulling tubing. Shut well in for night.

12-20-62

Rigged up Lane-Wells. Ran Gr/Neutron log. Logged from 5792.5' to 4700'. Wireline TD at 5792.5'. Ran and set BridgePlug at 5690'. (Bottom of Plug. Plug top 5688') Ran dump bailer and dumped 1 sack Slo set cement on plug. Calculated PBTD 5680'. Rigged down Lane-Wells.

Ran tubing with Dowell abrasajet perforator, with collar locator above. Checked collars.

12-21-62

Rechecked collar, set tool with jets at 5626'. Two jets in tool open. Perforated and notched casing using 2000 gal 3% acid solution carrying 1000 lb sand.

(Jetting pressure 3000#. Started 40 bbls perf fluid in. Used apprx 26 bbl fluid when pressure increased. Broke loose and finished job at 5000#. Dowell believed 1 jet had plugged. Inspection of tool after job showed metal screen around jets had slipped. At least 1 jet had cut hole in screen and was open.)

Circulated sand and acid with apprx 200 bbls water. Acid gave kick to indicate some spending. Very slight sand return with 60-100 bbls circulation. Continued circulating with 200 bbls available fluid. Still some sand return at end of circulating period.

Pulled tubing and jet tool. Ran 2 joints tailpipe bullplugged, with 6' perf sub and seating nipple above and tubing. Rigged up ready to swab.

12-22-62

Swabbed well to bottom. Caught 3 hr test, had no apparrent fluid fillup.

12-23-62

Ran swab. Had 150' plus fillup.

12-23-62 cont.

Lowered tubing to check TD. Found fillup to 5638.5'. Raised and landed tubing with bottom of tubing at 5619.5'. Pump shoe at 5550.5'.

Released rig. Did not pull rods from No.2 and run pump until instillation of pumping unit and electric in order to have unit on hole when well starts pumping, because of excess sand in hole.

Richard Gregory

ACID JOB ON HUBER NO. 3
July 25, 1963

Acidized well with 250 gallons Dowell SFW.

Formation B 1.

Tubing Size 2 1/2".

Casing 5 1/2", 14#.

Acidized through notch at 5,626'.

July 24, 1963

Pulled rod, string and tubing. Tubing string at 5634.42 feet.

July 25, 1963

Rigged up Wireline, Inc. Collared in with Lane Wells log. Checked total depth to top of sand at 5644 feet. Rigged up and ran Baker Model N drillable cast iron bridge plug. Set bridge plug at 5637' KB. Correlated with Lane Wells log. Add a top of bridge plug on ground level elevations - 5628 feet.

Rigged up and ran tubing in hole with Baker Model packer. Positioned one joint off bottom. Went in hole, tagged bottom at 5637 feet. Picked up 16 feet, placed open end of tubing at 5620 feet, 6 feet above slot and placed packer at approximately 5590 feet.

Time Analysis, July 25, 1963

12:30 p.m.	Filled hole by circulating crude oil down tubing.
12:40	Hole full of oil--started acid into tubing to spot.
12:47	Acid in tubing. Started oil behind.
12:54	Acid on spot opposite slot. Shut down pumps. Set packer.
12:58	Started displacement of acid using maximum pressure of 1000 lbs. Displaced one-fourth bbl. of acid. Shut down pump.
1:05	Pressure dropped to 550 lbs. Started pump slowly.
1:05.5	Pressure 1000 lbs. -Shut down. Displaced one-half bbl. of acid.

July 25, 1963 (cont'd)

1:11 p. m.	Pressure dropped to 600 lbs. Started pump slowly.
1:11. 5	Pressure 1000 lbs. Displaced one-fourth bbl. of acid. Shut down pump.
1:16	Pressure dropped to 600 lbs. Started pump slowly.
1:16. 5	Pressure 1000 lbs. One-half bbl. acid displaced. Stopped pump.
1:21	Pressure dropped to 600 lbs. Started pump.
1:22	Pressure 1150 lbs. Displaced one-fourth bbl. Stopped pump.
1:27	Pressure dropped to 200 lbs. Started pump.
1:28	Displaced one-fourth bbl. of acid. Pressure 1150 lbs. Stopped pump.
1:34	Pressure dropped to 200 lbs. Started pump.
1:35	Displaced one-half bbl. of acid. Pressure 1100 lbs. Stopped pump.
1:37. 5	Pressure dropped to 500 lbs. Started pump.
1:38. 5	Displaced one-fourth bbl. of acid. Pressure 1000 lbs. Stopped pump.
1:43	Pressure dropped to 200 lbs. Started pump.
1:45	Displaced three-fourths bbl. of acid. Pressure 950 lbs. Stopped pump.
1:53	Pressure dropped to 50 lbs. Started pump.
1:56	Displaced 1 bbl. of acid. Pressure 850 lbs. Stopped pump. Let pressure bleed off. Shut down.
	Let acid sit 6 minutes. Switched connections to annular side. Pump 2 bbls. of oil into annulus to flush any possible acid around and below packer. Rigged acid connections down. Swabbed acid back through tubing. Swabbed 1 hr.
3:45	Swabbed tubing down to 5000 feet. Recovered some acid on last run. No water.

July 25, 1963 (con-t)

4:00 p. m.	Pulled first swab off bottom, 5618 feet. Noted possible 200 foot rise in fluid in 15 minutes (1 bbl.). Recovered low acid-water and salt-water and load oil.
4:15	Hit fluid 400 feet off bottom. 15 minutes fillup approximately 400 feet (2 bbls.). Recovered oil-water-emulsion estimated 25% oil.
4:30	Hit fluid 300 feet off bottom. 15 minutes fillup, estimated 300 feet. Recovered oil and water estimated 15% oil.
4:45	Hit fluid 250 feet off bottom. Estimated fillup 15 minutes, 250 feet. Recovered oil and water estimated 10-12% oil. Shut down. Closed well in for night.

AUG 1 1963

Report of Workover Huber 3#

7-24-63

Rigged up Western Rig No. 8#, pulled rod string to break, went in holle with overshot, clamped on to rod string & pulled rod string & pump. Pulled tubing & run tubing tally. Checked out 5634.42'- shut in for night.

7-25-63

Hooked up test tank & filled with 200 Bbls. stock tank oil. Rigged up Wire Line & collared in with Lane Wells, checked total depth to top of sand & found at 5644' Rigged up & ran Baker Model N drillable CIBP & set top at 5637'

Rigged up & ran tubing with Baker Model CI Fullbore retrievable Cementer Packer & set at 5618' Hooked up Dowell & filled casing with oil from test tank. Started acidizing, (Mr. Dave Love will give a detailed report on this phase)& will send a copy here for the file. 5618'

Swab tested for one hr. First fillup 400' off bottom, second fillup 300' off bottom, & third fillup 250' off bottom, all at 15 min. intervals.

First test indicated			approx.	25% oil
Second	"	"	"	15% oil
Third	"	"	"	10% oil

Shut in for night.

7-26-63

14 hr. overnight was 3600' fluid. Estimated 400' oil and 3200' Water, or approx. 9% oil & 91% water on swab test. Released Packer, then pulled tubing & Packer. Run tubing & tagged bottom, pulled back 5' and set. Run pump & rods, hung on beam & pumped up OK, released Rig.

Pump no. 808- 2½" x 1½"x 16'Axel USI W/BTM cup H/D rebuilt 7-26-63
Ran 1 anchor joint
1- 6' perforated sub
1- seating shoe
175- joints 2½" tubing
1- 4' & 2- 2" subs on top

Threw out 4-3/4" bad rods
Replaced with 3-7/8" rods from Huber 1# & 1-3/4" rod from Huber 1#
Changed out 14-3/4" rod boxes
Used 1-8'sub x 3/4"
" " 1-6'x3/4"sub
" " 1-4'x3/4"sub

Claire Haughey

Well Service Report

Huber Well #3

8-6-65

Rigged up Western rig & removed well head. Made up 2 3/8"x 6' sub built up as a clustrite drill by Homco. Run drill & tubing & tagged top of cement at 2856'. Pulled back one joint & installed Kelly rotary head. Made up swivel on Kelly bar & run in hole & closed in. Hooked up mud pump to swivel. Connected annulus to mud tank & connected mud tank to mud pump & filled mud tank with water from TK-III-B. Hooked Kelly power head to engine. Everything ready to start drilling tomorrow morning.

8-7-65

Circulated for I5 minutes & started drilling holding weight at I000 lbs checking returns for every foot of hole made. Hit first tight spot at 2872' & remained tight to 2882', then dropped to 2884' & tightened at 2885' with a few steel cuttings in the returns. Remained tight to 2892' & then loosened. The volume of returns started dropping off at this point, indicating through cement & picking up stringers. Continued to 2919' & returns stopped. All returns is cement with a few steel cuttings with no shale. Very good indication we are inside the pipe. Pulled tubing & removed the 2 3/8"x 6' drill sub & made up the 4¾" rock bit & run in hole. Found resistance at 2853' & drilled to 2872' with little trouble. From 2872' to 2893' was slow With our roughest spot at 2885' showing steel cuttings in returns. Drilled to 2920' & returns stopped. Pulled tubing & 4¾" bit. Shut in for night.

8-8-65

Made up Homco's 4 3/4" clustrite tapered mill W/pilot & run in hole on 2½" tubing. Using 2 3/8"x 4' sub as a pilot. Hit metal at 2853' and had steel cuttings in the returns all the way to 2866' which took I2 hrs. to drill I3'. Shut in for the night. Changed out 4 spark plugs in mud pump engine.

8-9-65

Removed well head & installed Kelly power head. Made up Kelly bar & circulated for I0 minutes. Started milling with 4 3/4" mill at 2866' and milled to 2872' where it hit a tight spot. We made this 6' in 4 hrs. From 2872' to 2888' it took 7 hrs. Shut in for night. Made I2' of hole during II actual hrs. of milling.

8-I0-65

Removed well head & installed Kelly power head. Made up Kelly bar & circulated for I0 minutes. Started milling at 2878' to 2880' in 2½ hrs. Milled from 2880' to 2885' in 2 hrs. Milled to 2920' & circulated for I0 minutes. Pressure tested & held at 800 lbs. Pulled tubing & mill. Shut in for the night. Ordered R-3 packer from Halliburton.

Continued

Continued:

7-II-65

Made up Halliburton R-3 packer & run in hole & set at 2803'. Rigged up power head & mud pump & filled casing with fluid & swabbed below packer to find if squeezed area is giving up fluid. Found packer leaking by. Took pull from I6,000 to 25,000 lbs & swabbed below packer. Packer still leaking by. Took 30,000 lb. pull & swabbed down. Pulled packer & made up Bridge Plug retreiving tool & run. Run to 2920' & hit obstruction, pulled back I0' & lowered, going by obstruction & went to 4222' & started circulating with heavy returns of cement & mud, with some steel cuttings. Dropped to 4253' with similar returns. Did not tag bridge plug believed to be at 4232'. Continued this procedure to 4432' & tagged bridge plug. Circulated for 25 minutes before returns cleared free of mud, cement, steel cuttings, shale, and sand. Set down on bridge plug with retrieving tool & latched on. Fish pulled loose at 40,000 lbs. Set down again on bridge plug & over-shot pulled loose again. We were conserned as to possible damage to over-shot when it hit the obstruction at 2920'. We repeated this procedure & continued circulating several times before latching onto fish. Pulled tubing & bridge plug. We found no obstructions coming out of hole. Capped well & shut in for the night.

7-I2-65

Made up 4 3/4" rock bit (borrowed from Murphy) & run in hole to 4432' & tagged top of shale. Drilled & circulated to 4442' & fell through to 4645' & tagged shale again. Drilled & circulated to 4955' with shale very hard. More like drilling cement. Circulated for ½ hr, pulled back one joint & shut in for the night.

7-I3-65

Made up Kelly bar & power head. Started mud pump engine & hose ruptured. Repaired hose. Tried starting Kelly power head engine & starter not working. Rigged up tubing tongs & turned tubing with engine in gear & it started. Pulled started & took to town for repair. Looks like one of "those days". Started drilling shale at 4955'. Shale drilling very hard. Drilled to 5356', circulated for 25 minutes, pulled back one joint & shut in for the night.

7-I4-65

Made up Kelly bar & power head. Started mud pump & power rotary head engine. Started circulating & drilling at 5356'. Drilling very hard. Drilled to 56I4' & hit obstruction. Set down I5,000 lbs with no torque or pressure increase. Circulated & cleaned hole. We are at a loss for an answer. Pulled tubing & tallied out of hole to double check our figures. Tally was 56I7'. Found clusters on bit blocked with three pieces of steel. Shut well in for the night.

7-I5-65

Made up bit & tallied tubing in hole. Tagged obstruction at 56I8' & drilled to 5634'KB. Circulated I30 bbls clean water cleaning up hole. Pulled tubing & 4½"bit. Made up tail pipe on Halliburton R-3 packer & run in hole. Set packer at 5595.24 W/I9,000 lb tension. Open end tail pipe at 5625.62. Filled casing with water & pressured to 300 lbs & held.

Continued:

Continued:

Rigged up & pumped fluid into formation rated at ½ bbl per minute at I000 lbs pressure. Rigged up & started swabbing at I5 minute intervals. Formation not giving up fluid at I000, 2000, or 3000 ft. tests. At 4000' in I5 minutes, formation gave up 300 ft. of fluid (approx I½ bbls) At 5000 ft. at I5 minute intervals, formation gave up I00 ft. fluid with some gas & small trace of live oil. Back side of packer held pressure of 300 lbs. Released pressure & shut in for the night.

7-I6-65

Rigged up & run swab. Had 3500' fillup overnight (I2 hrs.) Swabbed at I5 minute intervals with formation fluid in returns & increase in gas & oil. Released packer & pulled tubing. Removed tail pipe. Run packer, one joint tubing & made up seating nipple & run tubing. Set packer at 56I8' with seating nipple at 5585' & I9,000 lb tension on packer. Filled casing with water & tested with 50 lbs & held. Made up pump No. OWS A-9 2"x I½"x I6' No. IC3. W/BHD. Run rods & hung well on beam. Fluid pumped up in 45 minutes. Pressure tested to 300 lbs & held.

7-I7-65

Rigged down Western rig & drilling equiptment.

Louis Hawkins

Huber #3 Workover Report

3-I2-65

Rigged up Western rig & run swab to 2,000 ft. with fluid level at I500 ft. swabbed, run swab to 3,000 ft, with fluid level at 2,I00 ft. Swabbed. Run swab to 4,000 ft. with fluid level at 3,200 ft. Swabbed. Run swab to 4,800 ft. with fluid level at 4,200 ft. and stopped, swabbed and had a heavy concentration of mud. we swabbed at I5 min. intervals. As swab would not drop below 4,800 ft, we hooked up circulating pump and circulated down tubing & out through anulus. Pressured to I,500 lbs And broke through, pressure dropped to 750 lbs. & after approx. 7 minutes pressure dropped to 450 lbs. & lost circulation. Called Homco & shot tubing collar twice at 2,878 with no success. Run shot & collar locator again to 2,852 & shot collar & backed tubing out of collar. Started out of hole with tubing & shut in for night.

3-I3-65

Pulled 2842' tubing. Run Homco pointed shoe & 60' wash pipe on Westerns hydraulic rotary swivel. Tallied tubing going in hole & tagged collar at 2845'. Started circulating pump & washed over tubing fish to 2856' & hit obstruction. Pulled tubing, washover pipe & shoe. Shoe indicated metal obstruction, at 2856' Rigged up 6 drill collars & overshot & ran in hole, latched onto tubing collar fish & jarred for ½ hr. with no success. Pulled tubing, jars, & overshot. Layed down jars & overshot. Ran tubing back in hole open ended & screwed into tubing collar. Shut in for night.

3-I4-65

Rigged up Homco wire line & run Jet shot to 2907' & cut tubing off. Pulled wire line, screwed tubing out of collar at 2845' & came out of hole. Ran overshot, 6 drill collars, & tubing. Jarred for 4.5 hrs. & jarred fish 5.5 ft. before jars gave out. Pulled tubing, jars, & overshot. Shut in for night.

3-I5-65

Ran overshot, 6 drill collars, & tubing, latched onto fish. jarred for approx. ½ hr. circulated through tubing for ½ hr. Jarred again with progress. Repeted circulation & jarring until fish came free. Pulled tubing & fish (2 joints tubing) Ran 4¼" swedge. Swedged from 2856' to 2888.6 with bumper jars until ceased to progress. Shut in for night.

3-I6-65

Bumped swedge with bumper jars at 2888.6 for 20 mins. with no success. Circuleted for I hr. & jarred for another I0 mins. with no success. Afraid of going through wall of casing. Shut down due to weather.

Continued:

Cont. Huber #3 Workover Report

3-I7-65

Bumped 4½" swedge with jars for ½ hr. Circulated for ½ hr. Bumped again for approx. ½ hr. with no success at 2888.6 Pulled tubing and swedge (4½") as posibility of going through wall of casing. Run (I) joint of jagged end tubing below 2 7/8" tubing string for washing over to fish. Tagged fish & circulated through tubing. Pulled tubing and (I) joint 2" with teeth out on end. Made up 3 7/8" swedge and bumper jars & drill collars & started in hole. Shut in for night.

3-I8-65

Completed running 3 7/8" swedge, bumper jars, drill collars, and tubing. Swedge went through colapsed area (2856' to 2888') with little resistance. Tagged fish (2907) & circulated. Pulled tubing, drill collars, bumper jars, and tubing. Rigged up tubing spear, jars, and run tubing. Speared and latched onto fish. Circulated, came out of hole with complete tubing string. Shut in for night.

3-I9-65

Rigged up 4¼" swedge, bumper jars, drill collars, and run tubing. Went through restricted area with little trouble. Pulled tubing and swedge. Made up 4½" swedge & run. Had little trouble going through bad area. Pulled tubing & swedge. Made up 4 3/4" swedge & run. Bumped through colapsed 2856' to 2888' & went down & tagged suspected shale bridge at Approx. 4250' Pulled back to 2850' & shut in for night.

3-20-65

Pulled remaining tubing in hole (2850') Rigged up Halliburton retrievable Bridge Plug & RTTS Packer. Run Bridge Plug to shale bridge at (4232') and set. (Had approx I8' fill over night) Pulled back I stand (approx. 60') & set Packer. Spotted sand on top Bridge Plug at I500 lbs. press. Released Packer and set at 2897' testing casing below bad area at I,000 lbs. pressure for possible leak. Tested OK. Released Packer & set at 2655' for cement squeeze. Halliburton squeezed with I50 sks of salt saturated cement P02 Mix at I,000 lbs & held. Shut in with pressure on casing.

3-2I-65

Lowered Packer to 2755' & set for cement seal squeeze W/Latex Halliburton rigged up & circulated for approx. ½ hr. Pressured casing to I,000 lbs with no break down. Increased press. to I500 lbs. W/no break through. Pressured to 2,300 lbs. W/¼ bbl. per min. break down. Increased pressure to 2,500 lbs W/ no increase in volume. Rigged up & squeezed W/25 sks Ideal regular W/25 gals Latex at 2,300 lbs. Cement hit formation & pressure increased immediately. Lowered pressure to I,400 lbs & held for I2 minutes. Released Halliburton. Shut well in with I,400 lbs pressure.

Continued:

Cont. Huber #3 Workover Report

3-22-65

Released RTTS Packer & removed BOP. Pulled tubing & Packer. Made up Murphys 4 5/8" rock bit & run tubing. Rigged up Power Swivel & started circulating & drilling cement. Drilled to 2,856' & drill started jumping. Strong suspicions on iron. This is Area Homco suspected casing part. Called Homco for advice on extended procedures & they advised to run a 4 3/8" rock bit then go in with a Flush Rite Mill & Mill through. This is providing the 4 3/8" bit goes through, and if not, then a tapered casing Mill is recommended. I then called Mr. Polumbus with these recommendations for decisions, and Mr. Polumbus decided temporary abandonment. I then ordered rig crew to pull all tubing & lay down in singles on racks. Rig crew pulled remaining 2850' tubing & RTTS Pkr 4 5/8" bit & layed down in singles. Rigged down power swivel and drained & pulled valves in pump. Drained all lines. Shut in for night.

3-23-65

Run wash pipe & double stands tubing in derrick in hole. Pulled tubing & laying down on rack in singles. Broke out wash pipe in singles & loaded on H&H truck. Broke out drill collars in singles & loaded on truck. Loaded up Homco tools on truck & trailer. Capped well & rigged down.

Claire Vaughey

Huber Well no. 3 Acid job report

Rx July 13, 1966

Rigged up Western rig & pulled rods & pump. Run swab to locate fluid level & found at 4500' down, Rigged up Dowell. Opened annulus & pumped 250 gals. Dowell XFW regular 15% acid down hole & followed with 17 bbls formation water to fill tubing. Connected line to annulus & took 8 bbls water to fill annulus. Connected line back on tubing & installed pressure gauge on annulus. Started pumps & at 350 lbs on tubing we were getting pressure on the annulus, indicating a break-down of the packer. Stopped pumps. Closed valves on the annulus and tubing & let set for ½ hour. Opened valves & had a suck on both tubing and annulus, indicating formation taking fluid. Released Dowell. Left tubing & casing valved open total of 1½ hrs to equalize fluid in tubing & casing. Run swab & tagged fluid 200' down, indicating formation swallowed approx 6-7 bbls fluid with hopes of the acid going in.

Did not swab back as it would take half a day to swab both tubing and annulus down (Approx 150-180 $ rig time) Changed cups on pump & run in hole. Well pumped up & pressure tested to 400 lbs & held. Released rig. Changed out : 17- 3/4" & 3- 7/8" rod couplings.

[signature]

Workover Report

Huber Well no. 3

December 4, I966

Rigged up Signal rig & shut rig down as too late to pull rods & pump & would loose I2 hrs production.

December 5, I966

Rigged up & pulled rods & pump. Rigged up Dowell & pumped stock tank oil down tubing to check if Halliburton R-3 packer which is set W/20,000 lb. tension will hold. Pumped 40 bbls. oil & received a blow on back side indicating packer rubber not holding. Disconnected Dowell & rigged up for pulling tubing. Released R-3 packer & started out of hole. Packer set at 2900'. Added I double & worked packer down trying to release it. Added another double W/same results. Added third double working down hole & finally packer released. Started out of hole. Had 2 doubles out & packer set again. Added (I) double & packer released. This procedure was repeated for approximately four hours when packer retracted & pulled remaining tubing, discovering at this time packer mandrel had backed out of left hand threads, dropping 6' x 2 7/8" xx perforated sub,(below packer) mandrel, swedge, slips, & slip cage in hole. Shut well in for the night.

December 6, I966

Made up (Homco) 4 5/8" lead impression block & run in hole, tallying tubing in hole. Run impression block through repaired area from (2856'- 2888') very slow to feel for possible restricted area and didn't get any restriction. Run remaining tubing & tagged bottom at 5623.74 G.L. or 5632.74' K.B. with top of packer 6.74' below notch at 5626' K.B. Started out of hole with tubing & hit restriction at approx 2888'. Pulled remaining tubing & impression block. Have good impression of packer mandrel pin & we have a cut in the side of block indicating sliver of steel protruding I½" out from casing wall. Capped well & shut rig down. Released Dowell & called Homco to build tapered mill & will be on location tomorrow at 7:00 A.M. Dowell left acid truck on location for tomorrow.

December 7, I966

Made up Homco 4 7/8" tapered mill & run in hole. Run 5I0' & rig power drum split half way through on spool & guide. Capped well & shut down operations for repair. Estimated two days to make repairs.

Cont'

Workover Report

Huber Well No. 3

December 8, I966

Rig crew waiting for power drum to be delivered to location.
New drum delivered to location from Casper in P.M.
Homco 4 7/8" tapered mill in hole & 5I0' tubing. The repaired area from 2853' to 2890' was previously milled with a 4 3/4" O.D. to clear the O.D. of Halliburton tools of 4.55 O.D.
The tapered mill in hole was built to clear the O.D. of Baker tools with O.D. of 4.78I.

December 9, I966

Rig crew installing new power drum. Completed installation at approx I2:00 noon. Run tubing & tagged restriction at 2854' & started milling, using hydraulic power tubing tongs for rotation. Milled to 2865' & shut down for the night. Capped well.

December I0, I966

Removed well head & started milling at 2865' using tubing power tongs for rotation. Keeping between 5-6 points of torque. Rigged up hose to anulus & run treater water in hole for cooling mill. Milled to 2890' & fell clear to 2908' & milled to 2909' and fell through. Rotated to 2920' with no resistance. Pulled back through restricted area, rotating while coming through. Then dropped down through again & back up without rotation to make sure of no restrictions. Repeated this procedure three times & found OK. Pulled tubing & mill. Made up Baker model A-I Lok-set packer with 3' sub on bottom, open ended. Run tubing & shut in for the night.

December II, I966

Set Baker model A-I Lok-set packer W/I5,000 lb tension at 56I7.60' K.B. for bottom of packer, & top at 56I3.00' with bottom of open ended sub at 5620.49'. Seating nipple at 558I.52'. Rigged up Dowell & pumped stock tank oil down tubing to check packer seal. Leaking by packer at 600 lbs. Filled anulus W/oil. Circulated 250 gals. Dowell XFW regular I5% acid down tubing with stock oil. Spotted acid on notch at 5626' K.B. (Acidizing procedure on attached copy)
Completed acidizing & released Dowell. Rigged up for running rods. Installed new seating cups & checked pump. Run pump & rods. Hung well on beam. Well pumped up & pressure tested to 250 lbs & held. Released rig

Claire Vaughey

Huber No. # 3 Acid Job

December II, I966

Acid: 250 gallons Dowell XFW - I5%

Formation: Madison B-I

Casing: 5½" I4 lb.

Tubing: 2½"

Formation notch: 5,626' KB.

Baker Packer (bottom) set at 56I7.60'

3' open tubing sub: 5620.49'

Rigged up Dowell & pumped stock tank oil down tubing to check seal on Baker 5½" A-I Lok-Set packer. Packer seal broke down at 600 lbs. Pumped oil by packer filling casing. Circulated acid down tubing with stock oil & spotted asid on notch.

9:44 A.M. Acid spotted - stopped pumps.

9:50 Started pumps W/.4 bbl. per minute flow rate.

9:54 Stopped pumps. I,000 lbs. pressure. I½ bbls displaced.

I0:0I Pressure at 400 lbs. Started pumps.

I0:04 Stopped pumps. Pressure 800 lbs. I½ bbls displaced.

I0:II Pressure at 300 lbs, Started pumps.

I0:I8 Stopped pumps. I,000 lbs. pressure. Displaced 3 bbls

I0:2I Pressure at 700 lbs. Started pumps using oil to over-displace (I) bbl.

I0:23.5 Stopped pumps at 900 lbs. with (I) bbl over- displaced

II:08 I5 minute shut-in pressure drop was from 900 to 250 lbs. on tubing. No pressure on anulus due to un-balance of fluid in hole. This was caused from pumping oil down tubing, forcing water on back side. Released Dowell & rigged down lines. Run pump & rods & put well to pumping.

Claire Haynes

WORKOVER
E. A. POLUMBUS, JR. - HUBER NO. 3 WELL
EAST POPLAR FIELD
ROOSEVELT COUNTY, MONTANA

5/8/69	Move in Prather Well Service, pull rods and pump.
5/9/69	Pull tubing and packer. Perforate w/ 2 holes at 4870' for water test of Heath.
5/10/69	Set retrievable bridge plug at 5020', began swabbing.
5/11/69	Swab 15-20 barrels per hour, 80% water.
5/12/69	Squeezed perforations at 4870' w/ 100 sacks (50 sacks 50-50 poz and 50 sacks latex) Maximum pressure 2800 psi, final squeeze pressure 2500 psi.
5/13/69 to 5/14/69	Drilled out cement, perforated Heath from 4848-4874' w/ 25 holes. Ran swab found no fluid entry.
5/15/69	Acidized w/ 250 gallon 15% HCl. Swabbed dry.
5/16/69	Acidized w/ 500 gallon 15% HCl, followed by 200 barrels treated crude. Maximum pressure 2800 psi. Swabbing back fluid ~~20%~~ oil and 80% water at low rate.
5/17/69	Frac w/ 7000 lbs. 20-40 sd and 2500 lbs. 10-20 sd. in 400 barrels of water Maximum pressure 3800 psi.
5/18/69	Pull tubing and packer
5/19/69	Ran tubing, rods and pump, started pumping.
5/20/69	Pumping mostly water, about 10% oil.
5/21/69 to 5/27/69	Testing on pump. Production rate 150 BOPD and 231 BWPD.

Note: The bridge plug has been left in the hole temporarily to isolate the Charles.

Workover file

Huber 3 Heath Workover

5-8-69 - Rig up Prather rig - pull rods & pump.

5-9-69 - Pulling Tubing 8:AM (some trouble w/Packer)

10:30AM - out with tubing & Loc-Set

12:00 - start logging (cement bond log)(Fluid level 1650)

2:00 - bond log finished

2:15 - In with casing gun & collar locater - checked collers.

2:15 - shoot 2 holes at 4870'

2:30 - flange up head - shut down because of high winds.

5-10-69

7:AM - Start in with Halliburton RTTS & RBP - Tally tubing.

12:00 - RBP set at 5020' (163 Joints) (16 + 3 out)

12:20 - Packer set at 4800' (156Joints (7 + 3 + 16 out)

12:30 - Start rigging to swab.

1:30 - Swabbing

3:00 - swabbed dry 4 pulls - filling up 500' per pull

3:30 - well standing 1/2 hr. fluid level 3000' (1800' gain)

5:00 - swabbing - hooked up to flow line to test to tank.

7:00 - swabbed totoal 37 BBLS 2 Hrs,

5-11-69

8A - swabbing to test tank.

1:PM - Swabbed 69 BBLS to test tank - 20% Oil

5-12-69 - Squeeze (See Attached)

5-12-69

8AM - Released packer from 4800, ran 6 joints, set packer at 4986 and pressured tested RBP - Held.

9AM - Released packer - Spot 2 sacks sand on RBP in 5 BBLS water. Displace with 20 BBLS salt water. Pulled packer to 4380 and hung. Let well stand for 1 Hr. to let sand settle to RBP.

10:30 - Re set packer at 4737.

11:00 - Pressured back side to 250# - Established rate of 3 BPM at 2700# with saldt water. Tightened Stripper and checked lines.

11:50 - Start Mix (50 sacks 1-1 poz, 2% Gel, .6 Halad 9) follow with (50 sacks type G .9 LA2 latex) Total 21 BBLS Slurry.

12:00 - Start Displacement with salt water at 4 BPM at 1800#. Pressure slowely increasing. Slowed rate to 1/2 BPM with 5 BBLS Slurry still in tubing. Pressure went from 1500# to 1800#.

12:10 - Tubing clear, shut down for 5 Min pressure dropped from 1600# to 1500#.

12:15 - Pumped 1/2 BBL in 5 Min. pressure went from 1500# to 1800#. Shut down for 10 Min.

12.25 - Pumped 1/2 BBL - pressure increased from 1800# to 2075# Shut down for 10 Min. Pressure bled of to 1800#.

12:35 - Pressured from 1800# to 2800# Broke to 2600#, bled off to 1800#, shut down for 10 Min.

12:45 - Pressured from 1800# to 2500# - pressure held. Estimate 50' of cement in casing - Reversed out (37BBLs)

2:00 - Started out with tubing and packer to make up scraper and 4-1/2" Bit - Will drill out in AM.

5-13-69

7:00 - Start in with 4-1/2" bit and Halliburton scrapper.

8:30 - Hit obstruction at 2890' - spudded some, came back out of hole, couldn't see anything on tools.

10:30 - Start back in hole with 4-1/2" Bit only. could feel obstruction but could get through it. Wait on Swivel.

1:00 - Rigging up power swivel to work back and forth through tight spot before going in to drill.

2:00 - Worked tight spot for 1/2 hr. lay down swivel, Tubing tongs broke down. Shut down to fix.

3:00 - Start running rest of tubing to drill out.

4:00 - Tagged cement at 4769' (Approx. 100' to drill)

5:00 - Rig up to drill cement - Shut down for day at 6PM

5-14-69 - 7:AM Start drilling ~~xxx~~ out.

9:30 - Drilled out - dropped through at 4870' & circulating.

10:30 - Break out swivel and rig up to come out with bit.

11:00 - Start out with tubing & Bit.

11:40 - Tongs Broke , Shut down for 30 Min.

12:45 - Out of hole, Wireline rigged up and in hole with 3-5/8" casing gun.

12:50 - Shot 25 holes, (Perf 4848 - 72) Rig down Wireline.

2:45 - Get packer through tight spot.

3:15 - Set packer at 4737 and rig up to swab.

4:00 - swabbing -(Hole full)

4:30 - Hole dryed up in 4 pulls, Shut in for 1-1/2 Hr.

5:30 - NO FILL UP , Shut down for day.

5-15-69

7:00 - 300' fillup in 12 hrss (Water) Rig up Halliburton to acidise with 250 gal 15% acid.

7:40 - Start pumping acid , 2 BPM tubing 0#.

7:43 - Start pumping flush, 2 BPM tubing 0#.

8:52 - tubing full, .75 BPM tubing 2000#.

8;00 - acid enters formation, .5 BPM , tubing 2100#.

8:12 - 250 gals acid in formation, .5 BPM, tubing 1800#.

8:14 - 1 BBL overflush in formation, .5 BPM, tubing 1800#.

Instant shut in pressure - 1700#.
5 Min. shut in pressure - 1500#.
15 min shut in pressure - 1300#.

Load - 6 BBL, Displ. - 31.5 BBL, Total 37.5 BBL.

9:30 - 4 swab pulls, well dried up. Trace of oil, Shut in 1 hr.

10:30 - 300' fillup (Or lost on 4th pull?) - Water, Trace oil.

12:30 - No fill up.

2:30 - No fill up.

3:30 - No fill up. Shut down for further instructions.

5-16-69

7:00 - Swab run - 200' fillup - Water - Trace Oil.

8:00 - Rig Halliburton for acid-oil squeeze.

9:21 - start pumping acid 3 BP M Tubing - 0

9:25 - Start pumping crude 3 BPM Tubing - 0

9:30 - Tubing full Tubing - 150

9:31 - Acid to perforations 2.5 BPM to 3.75 BPM increase. Tubing 2500 to 2700 increase.

9:33 - 250 gal acid in formation. 4.5 BPM Tubing - 2800

9:35 - 500 gal acid in formation 4.5 BPM Tubing - 2800

10:15 - Treated crude in formation 4.5 BPM Tubing - 2800

Break down - 2700 to 2600
Maximum - 2800
Instant Shut In - 2300 Job cost -$843.00
5 Min Shut in - 2200
10 Min shut in - 2000
Treatment - 12 BBL, Disp. 200 BBL Crude - Total 212.

12:00 - Well flowing load oil.

12:30 - Rig up to swab, well still flowing a little.

12:40 - 1st swab run - Devonian Oil (Load)

12:45 - 2nd swab run - Devoinian oil - Heath oil mixture

12:50 - 3rd swab run - 30% Heath oil - 70% Water

1:30 - 4th swab run - 30% Heath oil 300' fillup.

2:00 - 5th swab run - 20% Heath oil 300' fillup

2:30 - 6th swab run - 20% Heath oil 300' fillup

3:00 - 7th swab run - 20% Heath oil 300' fillup

3:30 - 8th swab run - 15% Heath oil 300' fillup

4:00 - 9th swab run - 25% Heath oil 300' fillup

4:30 - 10th swab run - 25% Heath oil 250' fillup

5:00 - 11th swab run - 30% Heath oil 200' fillup

5-17-69

7:00 - Tubing full, 3 swab runs yielded approx 30% oil.

8:00 - Short of water for frac, waiting on truck. Halliburton rigged up and ready.

11:00 - Water truck filling frack tank.

11:35 - Prime pumpson Halliburton trucks.

11:36 - Start pumping Gel pad - 3000gal Tubing 0 12 BPM

11:42 - Start sand (20-40 1/2# per gal) Tubing 3100 12 BPM

11:44 - 20-40 sand on formation Tubing 3200 13.5 BPM

11:46 - increase 20-40 sand to 3/4# per gal

11:48 - 20-40 sand on formation Tubing 3300 13 BPM

11:53 - increase 20-40 sand to 1# per gal. ~~XXXXX~~ 12.5 BPM Tubing 3000#.

11:56 - 20-40 sand on formation Tubing 3200 12.5 BPM

11.59 - Start 10-20 sand at 1# per gal Tubing 3200 12 BPM

12:01 - 10-20 sand on formation Tubing 3200, 12 BPM

12:05 - Start flush Tubing 3000, 12 BPM 35 BBL Water

12:08 - End Job Tubing 3800 12 BPM - Instant Shut In - 2000
5 min " " - 1800
15 min " " 1500

12:30 - Halliburton rigged down.

1:00 - All crews released. Job Cost$3425.14

Huber Well No. 3 Acid Job

June I4, I968

Formation: B-I

Tubing Size: 2 7/8" - 8rd - J-55

Tubing depth: 56I3'

Notch: 5626'

Acid: 250 gals Dowell regular I5% XFW

Additives: 2 gals A-9 inhibitor, I-gal W-35 Non-Emulsion, & I-gal F-49 Surfactant.

I:30 PM - Dowell on location & starting to rig up lines

2:00 PM - Hooked up to water truck

2:I5 PM - Started pumps, pumping formation water down tubing to fill hole.

2:40 PM - Stopped pumps - tubing & casing full - closed casing valves

2:43 PM - Opened casing valve & start acid down tubing to spot.

2:48 PM - Acid on notch - stopped pumps - closed casing valve

2:5I PM - Start pump slow to check pressure increase & flow rate; # I00

2:54 PM - 450 lbs W/I bbl in & flow rate .3 bbl per minute.

2:57 PM - 600 lbs W/2 bbls in - flow rate .3 bbls per minute.

3:00 PM - 625 lbs W/3 bbls in - flow rate .3 bbls per min.

3:03 PM - 650 lbs W/4 bbls in - flow rate .3 bbls per min.

3:I0 PM - 650 lbs W/6 bbls in - flow rate .3 bbls per minute & starting to overflush I bbl.

3:I2 PM - stopped pump - immediate shut in pressure: 600 lbs.

3:I8 PM - 0 - pressure - Released Dowell & disconnected lines

Claire Vaughey

5-18-69

8:30 - Release packer (250# on well head)

12:30 - Out of hole with work over tubing.

1:00 - Lay down 23 joints of production tubing. (excess)

3:00 - Start in with Halliburton RTTS packer as follows.

Packer -	7.55	
Joint -	31.00	
Pump & Seating Nipple -	17.66	
K.B.	9.00	
Tubing	4751.79	
Packer set @	4817.00	(12,000)
Btm of Ret.Head	4825.00	
Seating Nipple	4785.00	

6:00 - Flange up well head and rig up to ~~[illegible]~~ run rods as follows.
1. Pump Plunger & Standing Valve
2. 167 3/4" rods
3. 23 7/8" rodds

note: pump is ~~[illegible]~~
2-1/2 x 2-1/4 x 9 x 12 x 16 TLC
Pump # TX-32

8:00 - Ready to start in with plunger and rods.
Shut down for day.

5-19-69

7:00 - Start running rods. (will have to lay down 20 3/4" and 7 7/8" rods - excess.)

10:30 - Hung well on and pressure tested - pressure held.

12:00 - Released crew & rig.

Huber No. 3 Well
E. Poplar Field
Roosevelt County, Montana

Summary of Workover Operation 8/4/71 to 8/16/71

Casing collapsed at 3225'± allowing water from the Dakota formation to enter the well bore and overpower production from the Heath formation. Efforts to pull tubing below stuck point and swedge out casing were unsuccessful. Dakota water was shut off by cementing down annulus with 100 sacks cement, thus cementing tubing in hole below 3200'±. Well test with 2" insert pump subsequent to workover was 28 BOPD and 200 BWPD from the Heath formation through original perforations 4848-4874 feet. Prior to casing failure well was making approximately 37 BOPD and 300 BWPD with 2½" tubing pump.

Chronological Report of Workover Operations

8/4/71 Rigged up, pulled standing valve, killed tubing with heavy salt water. Layed rods and plunger down. Standing valve was lost on way out.

8/5/71 Tested well to tank, flowing 130 BWPH, no oil.

8/7/71 Ran Differential Temperature Log which indicated water was coming from the Dakota 3150-90. Hole in casing indicated at 3310'.

8/9/71 Rigged up, could not get anchor loose. Worked anchor for 2 hours, twisted off tubing at 893'. Went in with overshot, latched on to tubing. Ran Dia-Log free point survey which indicated tubing to be partially stuck at 3225' and completely stuck at 3300'. Backed off tubing collar at 3190' and pulled. Ran rods and plunger back to try and pull standing valve. Got in tubing but plunger would no go below 3238'.

8/10/71 Pulled rods and plunger. Ran 223'-4½" OD wash pipe with 4 5/8" OD rotary shoe, 6-3 5/8" OD drill collars and hydraulic jars on tubing. Hit tight spot at 2894', rotated through. Did not feel tubing at 3190', hit obstruction at 3221'. Rotated for 1 hour and made 6", using power swivel. Pulled pipe, found shoe teeth worn off on outside edge. Concluded shoe was running on collapsed casing.

8/11/71 Ran 1 3/4" x 2 1/2" pump on rods to try again to get standing valve out of tubing. (Cannot circulate with standing valve in tubing.) Ran pump to 3260', would go no deeper. Ran 2½" tubing and screwed on to tubing at 3190' without difficulty and pulled 8000 pounds on tubing. Ran 1 3/4" tubular jars and 1½" sinker bar on sand line, went smoothly to 4800'. Ran 2½" tubing pump plunger, would not go deeper than 3260'.

Huber No. 3 Well
E. Poplar Field
Roosevelt County, Montana

8/12/71 Rigged up Dowell to cement down 2½" x 5½" annulus. Mixed and pumped 100 sacks common cement w/0.3% retarder. Displaced cement with 51 barrels of water. Got partial squeeze to 100 psi. Shut in at 2:30 p.m.

8/13/71 Rigged up to swab tubing, swabbed down to 3200'. Fluid entry about 15 barrels per hour. Ran 2.325" OD swedge, bumper sub, jars and 40' of 1½" sinker bars to try and swedge out tubing. Could not swedge out.

8/14/71 Picked up 7-1½" OD sinker bars, 5-1" rods and ran with swedge, bumper sub and jars. Worked on tight spot for 3 hours. Finally got swedge through. Found 3 tight spots in 8' overall. Worked swedge through tight spots several times until it went freely. Ran rods with 2¼" pump plunger and hung well on beam. Started well pumping.

8/15-16/71
Respaced pump several times, oil beginning to show.

8/16 to 9/3
Testing

9/3/71 Well test - 28 Bbls Oil, 200 bbls water. 24 hours.

Workover History #3

Lease & Well No: Huber #3
Field : East Poplar
County : Roosevelt
State : Montana
Well Location : NE NW 10-28N-51E

Date of last workover: 5-19-~~XX~~ 69
TD: 5899, PBTD: 5680, PBTD 5020 (RBP). KB: 9'
Producing Zone: Heath Sand, Perforations: 4848-72 KB
Latest Test: 36 BOPD, 280 BWPD.

Justification of Workover: Well started flowing 130 BWPH, No oil.

Summary of Workover:

8-4-71: Rigged up, pulled standing valve, killed tubing with heavy salt water. Layed rods and plunger down. Lost standing valve on way out.

8-6-71: Tested well to test tank, Well flowing 130 BWPH.

8-7-71: Ran Wireline Differential Temperature Log. Log indicated Dakota formation 3150-90 giving up fluid. Hole in casing indicated at 3310. Ran log to find formation with fluid standing, ran log to locate hole with casing flowing.

8-9-71: Rigged up, could not get anchor loose. Worked anchor for 2 hours, twisted off tubing at 893'. Called Acme and Dia-Log. Went back in with overshot, latched on to fish. Worked tubing 1/2 hour, streeh indicates tubing stuck. Ran Dia-Log free point, indicated partially stuck at 3225, completely stuck at 3300. Backed off tubing collar at 3190. Came out with fish . Ran rods and plunger to try to get standing valve. Got in tubing at 3190 but plunger would not go below 3238. Shut well in for night.

8-10-71: Pulled rods and plunger, ran 225' 4" washpipe and 6 3-1/2" drill collars on tubing. Rigged up pump and swivel. Had water truck fill 300 bbl tank and fill hole with lease water. Well began to flow out annulus. Loaded truck with heavier water from Murphy "F" Battery. Started pumping water down annulus, could not get any returns out tubing. Started pumping water down tubing, got some returns out annulus. Well flowed back out annulus. Reversed and went down ~~xxxxx~~ annulus, got some returns out tubing but well taking most of the water. Pumping at 4 BPM. Circulated 30 min. made 6" hole after tagging obstruction at 3221. Had to shut down to re-load pump suction tank. Turned on obstruction for 1 hour. Made total of 8" hole. Came out with tool. Tool indicates casing collapsed. Shut down for night.

8-11-71: Ran rods to check tubing, could not get plunger in. Lay down Acme washpipe and collars. Ran tubing back in and screwed on. Spaced out and got 8000 Tension on tubing. Ran 1-3/4" Jars to bottom of tubing, (Seating Shoe) ~~xxxxxxx~~ without feeling any tight spot. Ran 2-1/4" plunger on sand line, Plunger would not go past 3238. Shut down for night.

8-12-71: Cemented 100 sx down annulus . Well took most of cement on vaccum. Got partial squeeze to 100 Lb. but started breaking down. Shut in well over night.

8-13-71: Swabbed tubing to 3000'. Very little hole fill up. Tubing finally stabilized at 1000' fill up in 30 min. Swabbed untill 3:30 PM. Decided that squeeze was holding. Went in with rods, 2 - 1-1/2" polish rods, bumper sub, Jars, and 2-5/16" tubing swage. Swaged untill 8:PM with very little hole made. Came out with swage. Swage indicates just starting into tight spot. Shut down for night.

8-14-71: Ran 7 - 1-1/2" polish rods, 5 1" rods, Bumper sub, Jars, and 2-5/16" swage. Swaged tubing for 4 hours, finally got through tight spot. Total of 3 tight spots in 6'. Came out. Ran rods and plunger, plunger stuck in tight spot, spudded twice and plunger droped through. Tagged and spaced out and put well on beam. Well did not have good pump action, decided to leave pump untill morning.

8-15-71: Well still not acting properly, Plunger seems to be sticking at top of stroke. Lowered rods 4" and it acted a little better. Left well pumping.

8-16-71: Re-spaced pump, got plunger lowered estimated 3'. Origionally must have tagged on sand fill-up which evidently cleaned up with pumping. Well pumped smooth and action was good. released rig. Estimated 3 BOPD & 160 BWPD for last 24 hours.

8-17-71 Well pumping properly, estimate 24 hr production of 9 BOPD and 300 BWPD. Believe well comming back arouid to normal production rate.

Re-cap of Workover: Dakota formation cemented off, however, our bridge plug, anchor, seating shoe, and pump barrel are planted in hole. 5-1/2" casing is collapsed at 3221. Will pump well under these conditions for as long as possible. It is not known whether the plunger and standing valve will get by tight spot in tubing if we attempt to pull them. All perfs, PBTD, and down hole equipment remain same.

Ted Nees
Job Supervisor.

Huber #3
East Poplar Field
Roosevelt County, Montana

8-10-71 Ran 222.67' of 4½"OD wash pipe with 4 5/8"OD rotary shoe, 6 - 35/8"OD drill collars and hydraulic jars on tubing. Hit tight spot at 2894'. Rotated and worked through with 10,000# weight. Did not feel top of tubing at 3190'. Hit obstruction at 3221'. Rotated for one hour and made 6" to 3221½', using power swivil. Well tried to flow . Had to circulate with heavier water (130,000 ppm). Pulled pipe. Found shoe teeth worn off on outside edge concluding that shoe was running on collapsed casing. SION at 7PM

8-11-71 Ran 1 3/4" X 2½" pump on rods. Had difficulty getting into tubing at 3190'. Finally went in tubing and ran to 3260'. Pump would go no further. Sat down solid. Picked up with no drag. Worked pump for 20 minutes. Stroke on pump seemed to be getting shorter. Pulled rods and pump. Nothing in pump. Laid down and loaded out wash pipe and drill collars. Ran 2½" tubing and screwed onto tubing stub at 3190'. No trouble screwing on. Made up 9 rounds. Hung tubing on flange bonnet with 8,000# tension. 10', 6', and 8' tubing subs on top. Ran 1 3/4" tubular jars and 1 1/2"OD sinker bar (30') overall on sand line. Ran smooth to 4800' depthometer meas. Pressured tubing to 200 psi. Held OK. Filled casing and casing went on vacuum. Ran 2 1/4" tubing pump plunger. Would not go below 3260'. SION at 7PM

8-12-71 Rigged up Dowell to cement down 2 1/2"-5 1/2" annulus. Pressured tubing to 200 psi. Mixed and pumped 100 sacks of common cement w/ .3% retarder (20 bbls slurry). Displaced cement with 51 bbls of water. Annulus on vacuum until 48 bbls water pumped and then got 100 psi pressure. At conclusion of displacement, pressure was below 20 psi but still a positive blow. Rigged down Dowell and shut well in at 2:30 PM with TP 200 psi, CP 0 psi.

8-13-71 Rigged up to swab tubing. Swabbed down to 3200'. Recovered 140 bbls fluid, small amount of oil. Fluid feed-in rate 1500' per 1/2 hour or approx. 15 bbls per hour. Ran 2.325" OD swedge, bumper sub, jars and 40' of 1 1/2" sinker bars to try to swedge out tubing. Could not swedge out tubing. TOH with rods. Swedge looked like it could almost go. SION 7PM

8-14-71 Picked up 7 - 1 1/2"OD sinker bars, 5 - 1" rods and ran with swedge, bumper sub and jars. Worked on tight place for 3 hours Finally got swedge through. Bas places in three sections in about 8' overall. Went 150' below tight place and then TOH. Ran rods with 2 1/4" pump plunger and hung well on beam. Did not appear to be pumping quite right. Getting some vacuum on down stroke and a bump at top of stroke. Left it pumping to see if pump would begin to pump properly.

8-15-71 Checked pump operation. Still bumping at top of stroke, but down stroke vacuum much less. Pressured tubing up to 175 psi and held OK. Lowered pump 6" and left pumping for the day. CP 0 psi.

by Helen Teel

Workover History #4, Huber #3, Continued.

7-14-76 - (Cont.) Ran in Production string of tubing and set anchor. Started in with pump, pump stacked out at 1000'. Came out with pump.. Released anchor and pulled tubing to 1000'. Found 2 crimped joints of tubing. Replaced tubing and went back in hole. Set anchor and anchor sheared.

7-15-76 - Triped tubing out to replace anchor. noted that shear mechinism had lost off of anchor. (In hole on top of tubing stub.) Ran back in with exchanged anchor and set. Started in with pump and pump would not go past 300'. Ran in with overshot mandrell to check for scale. Mandrell would not go past 50'. (Tubing used from Huber #1 had scale build up in it.) Tried to run swab in, it would not go either. Got 600 gal of acid from Murphy Corp. aborted acid job on EPU 12. (Halliburton only charged us with 100 gal as acid had been in hole and back out.) Spotted acid in tubing and let soak for 2 Hrs to clean up scale. Circulated acid back out to pit. Ran in with 2-1/4" gauge ring, stacked out at 300' again. Re ran overshot mandrell to check if scale cleand up. Mandrell went good to 300'. Released anchor and pulled 300' tubing, found another crimped joint of tubing. Ran tubing back in hole and ran mandrell to TD with no obstruction. Tried to re set anchor and anchor sheared again. SDFN.

7-16-76 - Tripped tubing out again and replaced anchor. noted that 1 slip had fell off.(on top of junk in hole at 2791') Replaced 3 more bad joints of tubing. XXXXXXXXX Ran back production string as follows.

1.	Guiberson Anchor	Btm at 2789'
2.	Seating Nipple	2785'
3.	90 Joints Tubing	
4.	2 - 6' pups.	

Ran swab mandrell to TD with no obstruction.
Ran Pump and rods back as follows:

1. 1 - 2-1/2" x 1-3/4" x 12 x 14 x 16' RHBC Pump # 234
2. 106 3/4" Rods (Replaced 30 Rod Boxes)
3. 2 7/8" Rods

Hung well on, Well pumped up, Released Rig to Goings 1-10.

RE-cap of Workover.

Well nowin condition to enable us to pull tubing if nedessary to service. This well still has serious down hole problems as noted in Workover History #3 plus the additional problems created with this job.

Job Supervisor- Ted Nees

Workover History #4

Lease & Well No. - Huber #3
Field - East Poplar
County - Roosevelt
State - Montana
Well Location - NE NW 10-28N-51E

Date of last workover - 8-17-71
TD: 5809 PBTD: 5680 PBTD: 5020 (RBP) KB: 9'
Producing Zone: Heath Sand, Perforations: 4848-72'
Latest Test: 10BO, 245 BW

Justification of Workover: Cut off cemented in tubing to facilitate Well Service.

Summary of Workover:

7-9-76 - Pulled rods and pump. Pump had hole in barrell. Latched on to tubing, tubing parted while attempting to remove tubing flange. Pulled 2 stands tubing, tubing dragging 40 to 50 M. Tubing parted again. Rig broke down. Fixed Rig, pulled tubing to body part at 423'. Went in with overshot and latched on to fish. Started out of hole but could not pull tubing more than 40' due to drag & stuck tubing. Released overshot & SDFN.

7-10-76 - Pulled overshot and installed pack off in tool. Ran overshot back in hole and latched on to fish. Circulated 7-1/2% acid down tubing and out casing. Tubing pressure 1000, Casing 0. Recieved acid returns after pumping 18 bbls fluid, indication of hole in tubing at 850'. Acid did not appear to react with any scale. Circelated acid to pit as Dowells regulations prohibit circulating back to truck. Pulled on tubing and moved it 1' up the hole & stuck again. Overshot pulled loose and tubing dropped 15' down hole. Came out of hole to check overshot. Went back in with overshot but could not latch on. Came out of hole to install extension on overshot. Ran back in and latched on to tubing. Worked tubing untill it freed up. Pulled 48 jts of very poor tubing (Corrosion and rod cut) and 58 joints of extremely bad tubing. Ran back 48 jts of very poor tubing and came back out laying down. (layed down 58 jts on first trip out.)

7-12-76 - Picked up 37 joints of used tubing from Huber #1 and 53 joints of New tubing. Ran overshot and 1 joint wash pipe. Could not get on to fish due to scale in casing. Rigged up power sub and circulating equipment. Circulated and cleaned out 40' scale before latching on to fish. Pulled tubing and fish recieved 5 more joints of tubing on overshot. SDFN

7-13-76 - Ran back in with Overshot, wash pipe and jars. Latched on to fish, could not jar tubing loose. Shut down as could not ged Dialog for back off today.

7-14-76 - Rigged up Dialog. Ran Free Point Indicator, determined tubing to be free at 2800', Partially stuck at 2850', Completely stuck at 2900'. Ran string shot to back off tubing at 2796'. Did not get back off. Worked tubing untill tubing came free. Ran Collar locator and determined that tubing twisted off at 2791'. Pulled tubing and recieved 3 more joints in overshot pluss twisted off joint. (Clean twist off, Tools will go in.)

Workover History #5

Lease & Well No. - Huber #3
Field - East Poplar
County & State - Roosevelt / Montana
Well Location - NE NW 10-28N-51E

Date of Last Workover - 7-16-76
TD: 5809, PBTD: 5680, PBTD: 5020 (RBP), KB: 9'
Producing Zone: Heath Stand 4848-72' KB
Latest Test: 10 BO, 190 BW

Justification of Workover: Attempt to get well back on production (TA w/mud fillup)

Summary of Workover:

10-12-77 ; Rigged up, Picked up tubing and 4-1/2" pack-off type overshot.

10-13-77 : Circulated 280 bbls fresh water to clean up well. Tried to latch on to tubing stub at 2791'. Could not latch on. Tried to circulate overshot down on stub, still could not latch on. Came out of hole with overshot, tool marked up, indication of junk in hole or casing part. Went in hole with impression block indication of junk in hole or casing part.

10-14-77 ; Went in hole with smaller overshot (4-1/8"). Still could not get on fish. Came out of hole. Checked records again and discovered that a shear ring from a guiberson anchor had been lost in hole on previous job. Went in hole with magnet and spiral guide. Came out of hole and did not recieve anything. Went in hole with flat bottom magnet, came out of hole and recieved shear ring. Went in hole with 4-1/2" overshot, latched on to fish and pulled 10,000 tension. Hooked up pump truck and well circulated with no pressure. Recieved oil cut water and drilling mud. Fluid volume pumped whenwell cleanded up indicates circulation is at or near overshot. Suspect bad piece of tubing below tool.

10-15-77 ; Rigged up Dialog for free point. Tool would not go into fish. Went in hole with sinker bars, CCL and string shot. CCL indicates possible solit tubing below overshot as we could not log any more collars below this point. Tool hung up several times while tring to log collars. Had trouble getting down hole at 2807'. tool possibly going out side tubing at this point. Attemped to locate string shot at 2827' but could not get tool down hole. Came out of hole to check tool. String shot cut and twisted. Went in hole again and still could not get tool down. Came out of hole and rigged smaller sinker bar and string shot. Spotted shot from 2822-1/2 to 2831-1/2. Put 3 rounds LH torque in tubing and shot. Did not get back off. Worked tubing for 1/2 hour with no success. Rigged up another string shot and shot again. Still did not get back off. Got tool stuck several times again. Came out of hole with tools and released Dialog. Put 5 round LH torque in tubing and worked tubing for 1/2 hour. Torque let out but still could not ge tubing up hole. Turned tubing to right with 10,000 tension, tubing came loose. Came out of hole and recieved 12' piece of tubing with 1-1/2" split running entire length. Another guiberson shear ring was also hung on piece of tubing. Shear ring was giving us an erroneous indication of a collar at this point. String shot was shot at this point, not in a collar. Tubing extremely bad, Split and twisted off at 2803' Tubing may also be stuck at this point. Estimate 1-1/2" split in tubing, Back off tools XXX etc. can not be used as they will go outside tubing.

10-17-77; Went in hole with tubing and achor, set anchor and circulated well. Well had filled up with drilling mud again. Left tubing in hole and bull plugged well. Well temporarily abandon for further study.

Job Supervisor: Ted Nees

T.O.S. Hunter #3
NE NE Sec. 10, T28N, R51E
Roosevelt County, Montana

Elevation 2096 DF

10¾" @ 1003'
45# w/ 425 sks

5431'
5435'

CIBP @ 5450'

5482'
5492'

Cement Plug @ 5506'

5624'
5628'

5633'

Cement Plug @ 5636

5641'
5645'

5677'
5678'

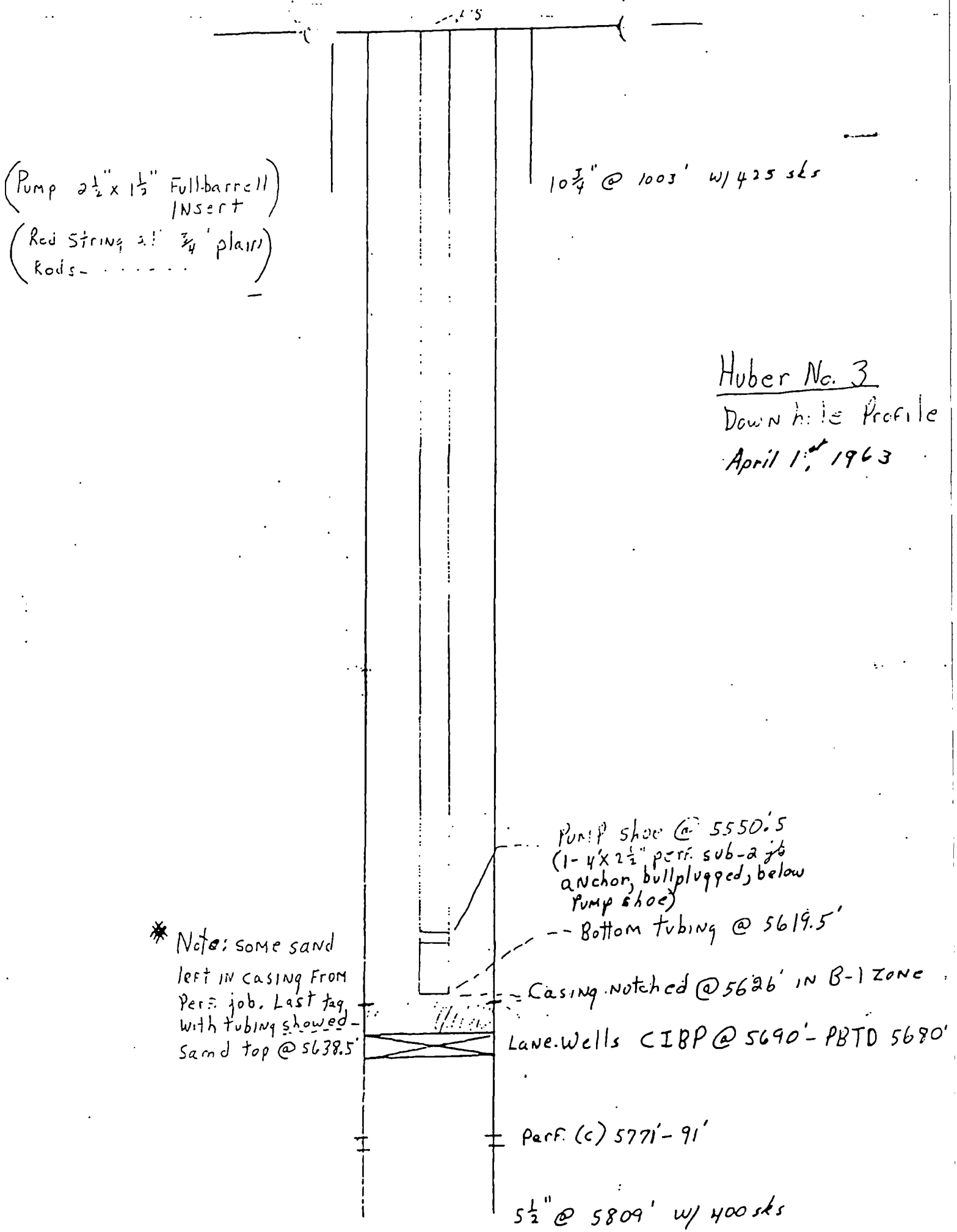
CIBP @ 5684'
5791'
5795'

5½" @ 5809'
14# w/ 400 sks
TD 5810'

Temp. Abandoned
Tubing pulled from this well.

1952 - Perf 5624-28
41-45
Acid w/ 500 gal.

Model D @ 5728



Huber No. 3

Down hole Profile

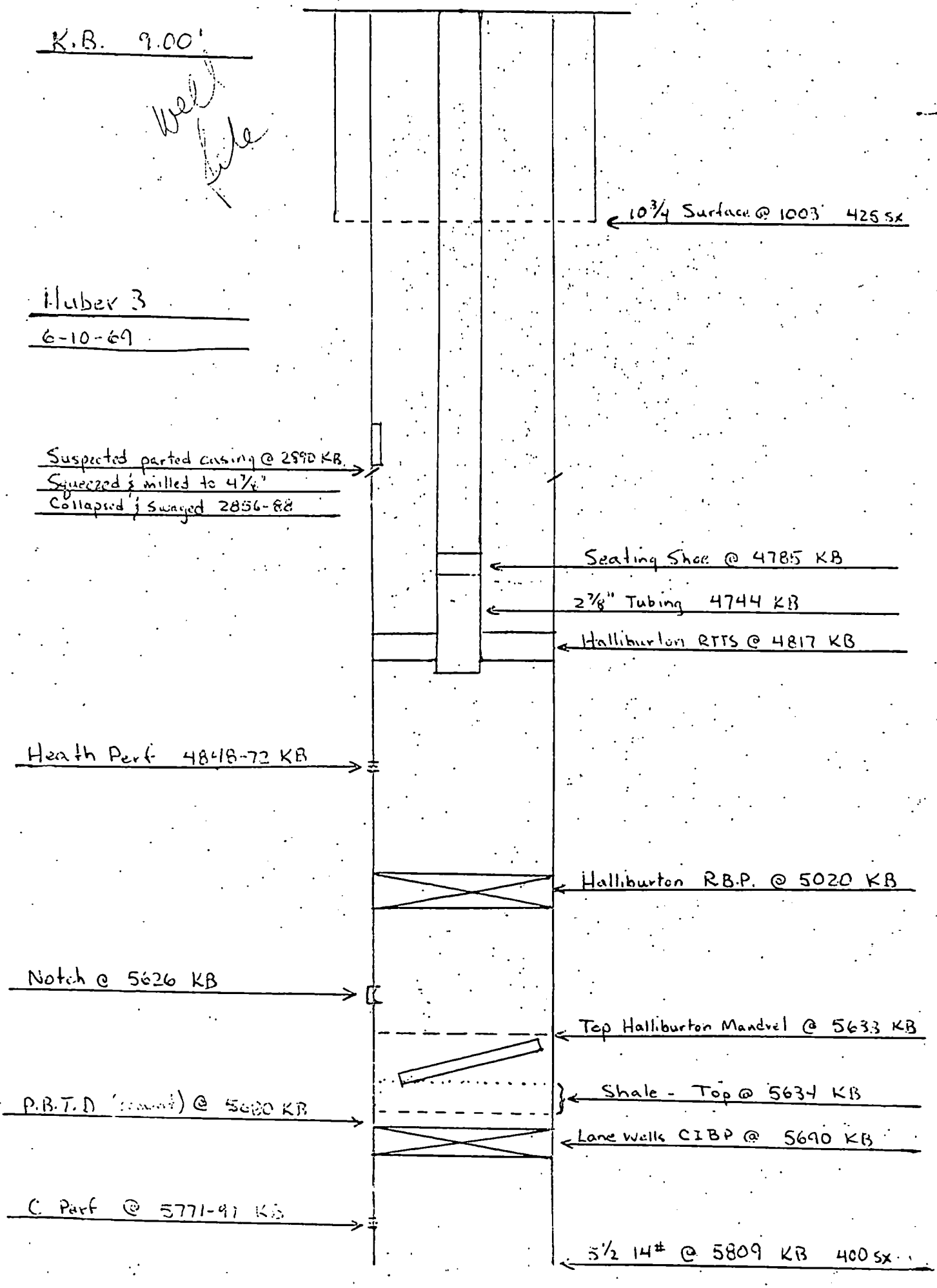
April 1st, 1963

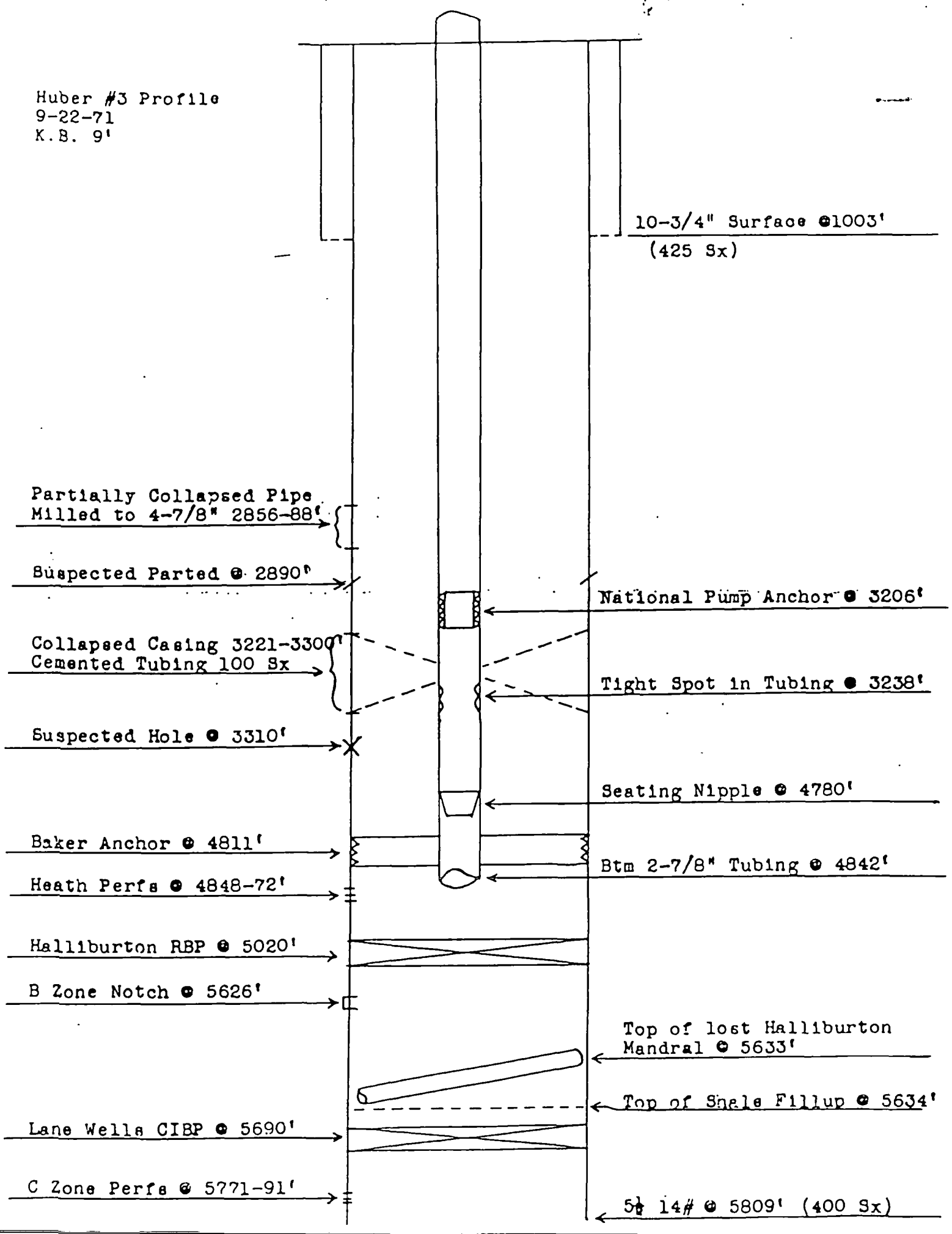
K.B. 9.00'

Well File

Huber 3

6-10-69



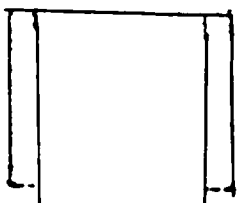

Huber #3 Profile
9-22-71
K.B. 9'
10-3/4" Surface @1003'
(425 Sx)
Partially Collapsed Pipe
Milled to 4-7/8" 2856-88'
Suspected Parted @ 2890'
National Pump Anchor @ 3206'
Collapsed Casing 3221-3300'
Cemented Tubing 100 Sx
Tight Spot in Tubing @ 3238'
Suspected Hole @ 3310'
Seating Nipple @ 4780'
Baker Anchor @ 4811'
Btm 2-7/8" Tubing @ 4842'
Heath Perfs @ 4848-72'
Halliburton RBP @ 5020'
B Zone Notch @ 5626'
Top of lost Halliburton
Mandral @ 5633'
Top of Shale Fillup @ 5634'
Lane Wells CIBP @ 5690'
C Zone Perfs @ 5771-91'
5½ 14# @ 5809' (400 Sx)

Huber #3 profile

Zones of interest

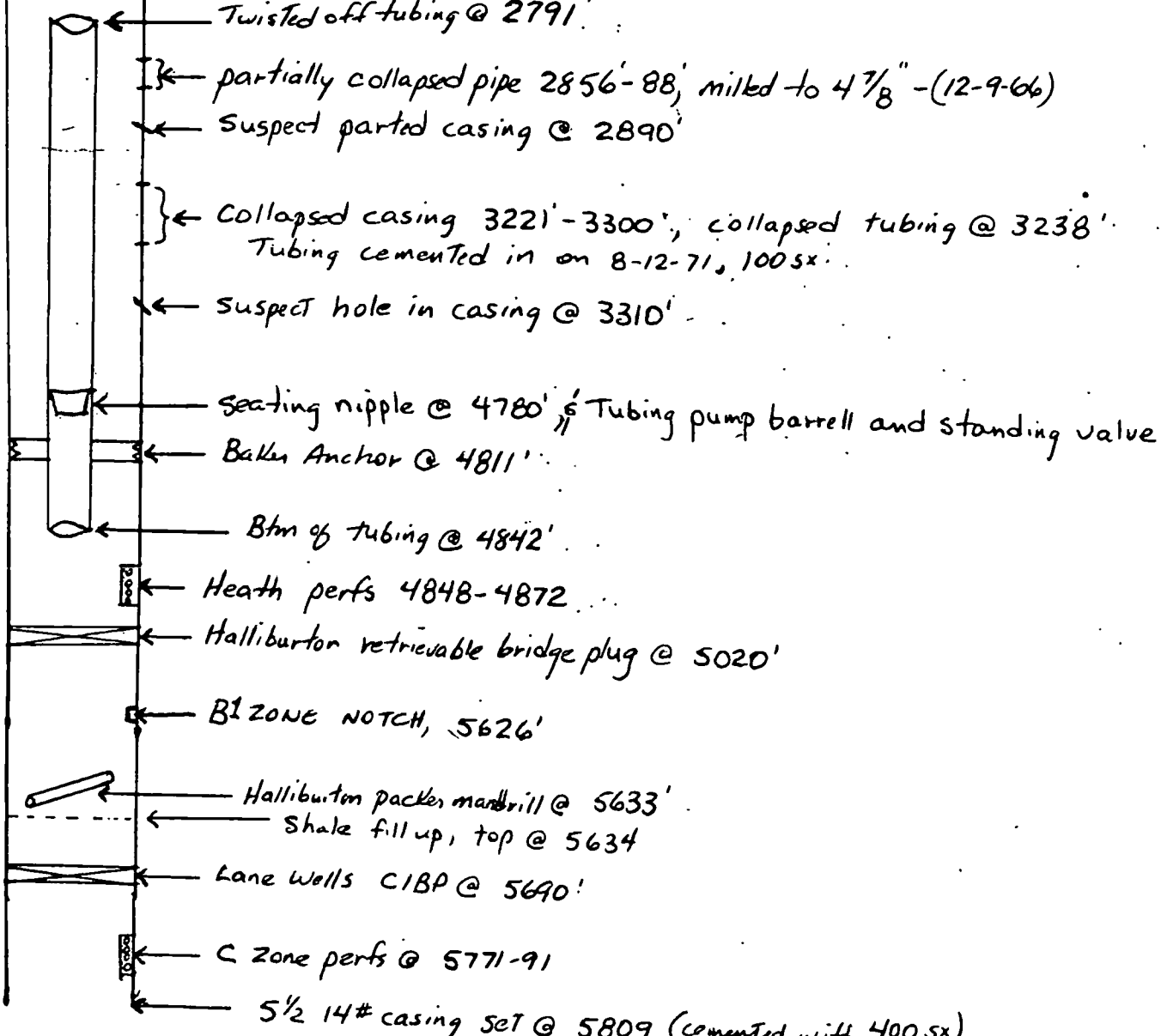
A Zone perfs - 5431-35, 5482-92 (SQUEEZED)
B' zone perfs - 5624-32 (SQUEEZED)
B² zone - (SQUEEZED) (5641-45) 5642-59
B³ zone - Apparently never opened
C zone - 5771-91

JUL 18 1977



10¾" pipe @ 1003'

STATUS AS OF 7-12-77, well filling up with mud
Madison shut off and Heath completed 5-19-69
Madism B-1 producing 13 B.O., 115 BW 12-1-68.
Heath producing 10 B.O. 190 B.W. 7-7-77



WIT

WPB III (3/6/86)

LEASE Huber

WELL NO. 3

LOCATION NE NE Sec. 10, T28N-R51E

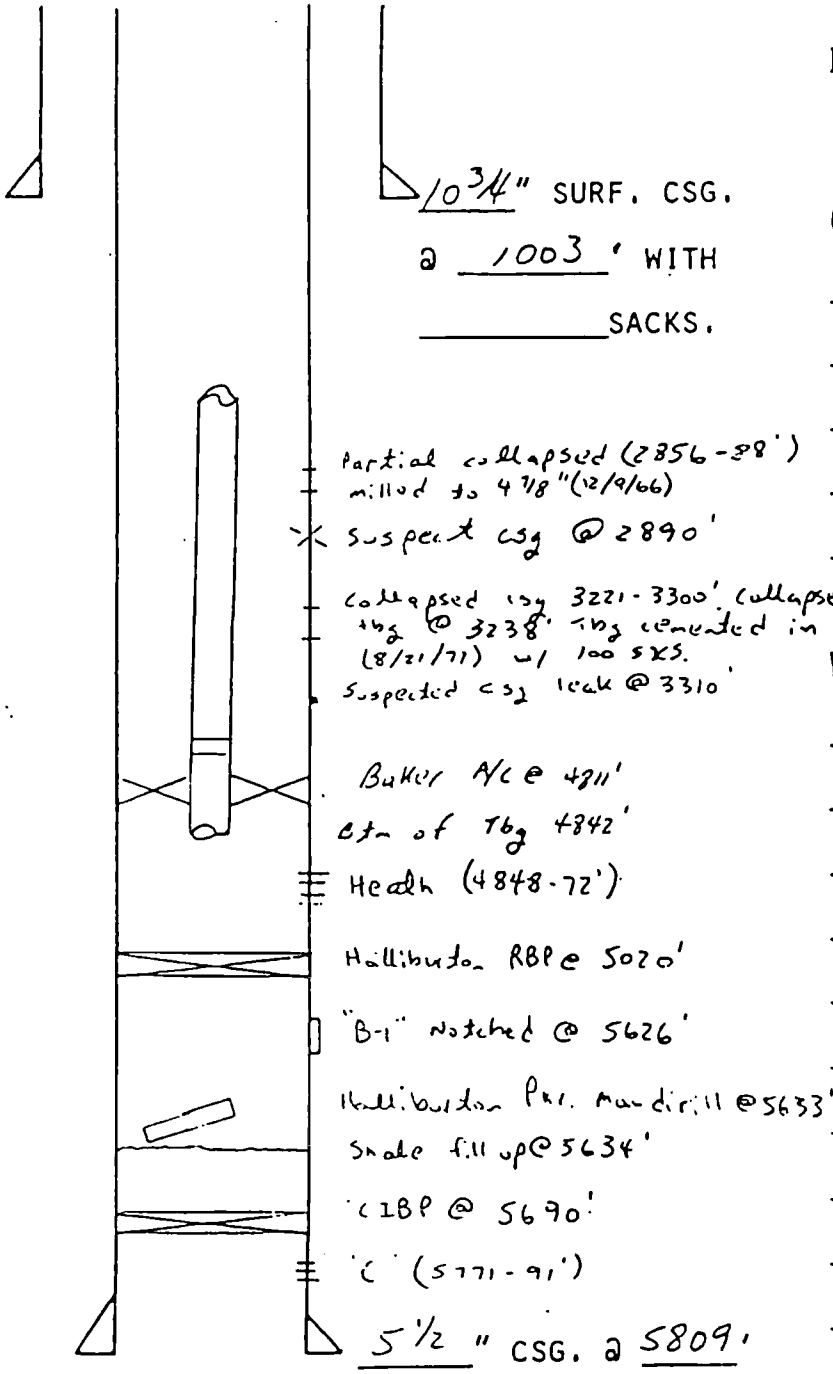
FIELD East Poplar

COUNTY Roosevelt

STATE Montana

TD 5809 KB 2096

DF _____ GL _____



COMPLETION INTERVALS:

WELL HISTORY:

Temp. Abandoned well (10/17/77)

REMARKS:

TREATMENT REPORT

DWL-494-F PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE: 7-25-63

WELL NAME AND NUMBER: Huber # 3	LOCATION: 10-28N-51E	CUSTOMER REPRESENTATIVE: Mr Love	TREATMENT NUMBER: 13-02-31
POOL: East Poplar	FORMATION: "B" 1	JOB DONE DOWN: TUBING A ☑ CASING B ☐ ANNULUS C ☐	ALLOWABLE PRESSURE: 2 TBG: 1000 3 CSG: —
COUNTY: Roosevelt	STATE: Montana	4 TYPE OF WELL: OIL A ☑ GAS B ☐ WATER C ☐ INJ. D ☐	
TYPE OF SERVICE: Acidizing		5 AGE OF WELL: NEW WELL A ☐ REWORK B ☑	6 TOTAL DEPTH: — CIRC. BHT.: —
CUST. NAME: E. A. Palumbus Jr.		8 CASING SIZE: 5½ 14#	9 CASING DEPTH: 5810
ADDRESS:		10 TUBING SIZE: 2" EUE	11 TUBING DEPTH: 5615
CITY AND STATE:		12 LINER SIZE: —	13 LINER DEPTH: —
		14 PACKER TYPE: Baker Model D	15 PACKER DEPTH: 5585
		16 OPEN HOLE: —	17 CSG. OR ANRL. VOL.: —
		18 TBG VOLUME: 32.5	19 STATIC BHT.: —

REMARKS: Max Pressure 1000 PSI Unless Otherwise Instructed.

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 9:30 A.M.

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
5626	Note 1				

TIME	INJECTION RATE	INJECTION BBLS IN	PRESSURE Tub	PRESSURE	SERVICE LIQUID (A)	SERVICE PURPOSE	SERVICE FLA.—(B) CONC.	(C) PROPPING AGENT OR (D) PLUGGING SERVICE TYPE	SIZE	CONC.	AMOUNT
12:30 PM					Fill Hole, Break Circulation						
12:40					Hole Full, Start Acid To Spot						
12:47	6	6	0		Acid in Tubing, Start Oil Behind						
12:54			0		Acid on Spot, Shut Down. Set Packer						
12:58	.5	0.5	1800	1	Start Displacement, Reached Max Press. Let Set						
1:05			550		Start Pump Slow						
1:05½		1	1000	2	Shut Down						
1:11			600		Start Pump Slow						
1:11½	.5	1.25	1000	3	Shut Down						
1:16			600		Start Pump Slow						
1:16½	.5	1.50	1000	4	Stop Pump						
1:21			600		Start Pump						
1:22	.25	1.75	1150	5	Stop Pump						
1:27		2	200		Start Pump						
1:28	.5	2.25	1150	6	Stop Pump						
1:34			200		Start Pump						
1:35	.5	2.75	1100	7	Stop Pump						
1:37½			500		Start Pump						
1:38½	.25	3	1000	8	Stop Pump						
1:43			200		Start Pump						
1:45	.38	3.75	950	9	Stop Pump						
1:53			50		Start Pump						
1:56		4.75	850	10	Stop Pump - Let Press Bleed Off - Tear Down						

TIME LEFT LOCATION: 3:30 P.M	20 AVER. LIQUID INJ. RATE: .50 BPM	21 ADJ. INJ. RATE (SOLIDS INC.): —	PROPS AND LIQUIDS INJECTED
MAX. PRESSURE: 22 1200	23 AVER. PRESSURE: 575 PSI	24 SHUT IN PRESSURE IMMEDIATE / 25 5 MINUTE	
DOWELL LOCATION: Glendive, Montana	DOWELL ENGINEER: Colell		

TYPE	SIZE OR PURPOSE	AMOUNT
XFW		150 gal

(A) NOTE: SEE (AA) FOR SPECIAL ADDITIVES

MA—MUD ACID; X—HCL ACID; APF—ACID PETROFRAC; FA—FRAC ACID; BDA—BREAKDOWN ACID; LO—LEASE OIL; RO—REFINED OIL; DO—DIESEL OIL; KE—KEROSENE; PJ—PETROJEL; PF—PETROFRAC; FW—FRESH WATER; BR—BRINE; WF—WATERFRAC; M41—M41 GEL; ST—STRATAFRAC; VR—VERSENE; SSS—TRIPLE S ACID; SLW—SLICK WATER; SLO—SLICK OIL; MUD—DRILLING MUD; RXI—RETARDED ACID I; RX2—RETARDED ACID II; RX3—RETARDED ACID III

(AA) ADDITIVES IN FLUID (EXCEPT FLA*)

CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF TOTAL GALS.

TYPE	TREATED	CONC.

(B) CONC. IS GIVEN IN LBS. OR GALS. PER 1000 GALS. OF LIQUID

J97—DOWELL J97; J101—DOWELL J101; J84—DOWELL J84; J98—DOWELL J98; J99—DOWELL J99

(C) SIZE IS GIVEN IN MESH RANGE CONC. IS GIVEN IN LBS. PER GALLON OF LIQUID

S—SAND; WS—WALNUT SHELLS; AL—ALUMINUM; NY—NYLON

(D)

FF—X830 FIXAFRAC; XJ—X820 GEL; DO—GELLED OIL; DW—GELLED WATER; RB—RUBBER BALLS; NCB—NYLON CORE BALLS; PB—PERMEABLE BALLS; MB—MOTH BALLS; RS—ROCK SALT; OS—OYSTER SHELLS

CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE	PROD. BEFORE TREATMENT	PROD. AFTER TREATMENT
			☐ SATISFACTORY ☐ UNSATISFACTORY ☐ UNKNOWN	☐ TEST ☐ ALLOWABLE	DAYS ☐ TEST ☐ ALLOWABLE

DOWELL DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND INVOICE NUMBER 15-02-3162

TERMS: Net 30. Add legal interest thereafter.

Please indicate on all remittances and send to: 1579 East 21 Street, Tulsa 14, Oklahoma

SERVICE ORDER RECEIPT AND INVOICE

DATE	CUSTOMER ORDER NO.	SHIPPED VIA
July 25, 1963		Truck

WELL NAME AND NUMBER	LOCATION AND POOL
Huber # 3	10-38N-51E E. Poplar

COUNTY AND STATE	TYPE OF SERVICE
Roosevelt Montana	Acidizing

SERVICE FROM DOWELL STATION AT: Glendive Montana 15-02

129901

SERVICE ORDER

IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS

I have read, understood and agreed to the terms and conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER BY x [illegible signature] AUTHORIZED AGENT

CUSTOMER'S NAME: E. A. Polumbus Jr.

ADDRESS: 720 Johnson Building

CITY AND STATE: Denver 2, Colorado

FLUID EXEMPT STATEMENT: Must be signed ONLY if process license fee does not apply and conditions set forth below are true: Either oil produced from same formation in same field as well being treated or unthickened water or acid was used without fluid loss additives as fracturing fluid in this treatment.

EXEMPT - GAL.

CUSTOMER BY AUTHORIZED AGENT

SERVICE INSTRUCTIONS:

PRICE REF.	QUANTITY	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT PRICE	AMOUNT
[illegible]	[illegible]	Gals. Dowell X Service	.32	80.00
		Gals. Additional Dowell X Service		
[illegible]	[illegible]	Gals. [illegible] Service	.01½	3.75
[illegible]	250	[illegible]	.02	5.00
		Lbs. Sand — ☐ Sack Bulk ☐ Size	CWT	
		Sacks Cement		
		Miles Hauling Lbs.	TM	
[illegible]	1	[illegible] Pumper to Ft.		250.00
		Pumper to Ft.		
		Additional Hours Pumper		
[illegible]	[illegible]	[illegible] Williston [illegible]	.45	22.50
		SUB TOTAL		376.25
		Gallons License Fee		
	%	Tax on $		
	%	Tax on $		
		TOTAL		$ 376.25

DOWELL ENGINEER: [illegible signature]

RECEIPT: The undersigned hereby certifies that the materials and equipment listed above were received and the services were performed in a workmanlike manner.

CUSTOMER BY [illegible signature] AUTHORIZED AGENT

DWL - 260 - C PRINTED IN U.S.A.

DOWELL

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND INVOICE NUMBER _____

TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

{Please indicate on all remittances and send to: **1579 EAST 21 STREET TULSA, OKLAHOMA 74114**

SERVICE ORDER RECEIPT AND INVOICE

DATE	CUSTOMER ORDER NO.	SHIPPED VIA	SERVICE FROM DOWELL STATION	OUTPOST
July 13, 1966		Dowell Truck	Glenrose 15-02	

WELL NAME AND NUMBER	LOCATION AND POOL
Huber #3	Sec 10-23W-5TE
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE	**TYPE OF SERVICE**
Roosevelt, Montana	Acid

CUSTOMER'S NAME: E. A. Columbus Jr.

ADDRESS: 414 Patterson Building

CITY, STATE AND ZIP CODE: Denver, Colorado 80202 (ZIP CODE)

SERVICE INSTRUCTIONS: _____

FRACTURING LICENSE FEE STATEMENT: Must be signed ONLY if the fracturing license fee does not apply because the fracturing fluid used in this treatment was either:

1 - Unthickened water or acid.

2 - Crude oil produced from the same formation in the same field as the well being treated.

EXEMPT-GAL.

CUSTOMER BY _____ AUTHORIZED AGENT

SERVICE ORDER

IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS

I have read, understood and agreed to the terms and conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER BY _____ AUTHORIZED AGENT

ITEM NO.	QUANTITY	UNIT	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT PRICE	AMOUNT
51200-001	100	Mi.	B.F.E. 12/unit	.75	75.00
15000-004	1	Ea	TD Pump	264.00	264.00
10001-003	250	Gal	Dowell X	.33	82.50
10002-035	2	Gal	Inhibitor H-5	2.50	5.00
63002-055	1	Gal	F-40 Service	7.00	7.00
13005-052	1	Gal	W-35 Service	7.00	7.00
			SUB TOTAL		440.50
			Gallons License Fee		
			Gallons License Fee		
	%		Tax on $		
	%		Tax on $		
				TOTAL	$

DOWELL ENGINEER _____ PAYROLL INITIALS J.H.C

RECEIPT: The undersigned hereby certifies that the materials and equipment listed above were received and the services were performed in a workmanlike manner.

CUSTOMER BY _____ AUTHORIZED AGENT

DWL 260-G Printed in U.S.A.

DOWELL

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND INVOICE NUMBER 15-02-4757

TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

Please indicate on all remittances and send to: **1579 EAST 21 STREET TULSA, OKLAHOMA 74114**

SERVICE ORDER RECEIPT AND INVOICE

DATE	CUSTOMER ORDER NO.	SHIPPED VIA	SERVICE FROM DOWELL STATION	OUTPOST
December 5, 1966		Dowell Truck	Glendive 15-02	

WELL NAME AND NUMBER	LOCATION AND POOL
Huber #3	Sec 10-28N-51E E. Poplar
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE	**TYPE OF SERVICE**
Roosevelt, Montana	Rental

CUSTOMER'S NAME: E. A. Polumbus Jr.

ADDRESS: 414 Petroleum Building

CITY, STATE AND ZIP CODE: Denver, Colorado 80202 (ZIP CODE)

SERVICE INSTRUCTIONS:

FRACTURING LICENSE FEE STATEMENT: Must be signed ONLY if the fracturing license fee does not apply because the fracturing fluid used in this treatment was either:

1 - Unthickened water or acid.

2 - Crude oil produced from the same formation in the same field as the well being treated.

EXEMPT-GAL.

CUSTOMER BY _____ AUTHORIZED AGENT

SERVICE ORDER

IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS

I have read, understood and agreed to the terms and conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER BY _____ AUTHORIZED AGENT

ITEM NO.	QUANTITY	UNIT	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT PRICE	AMOUNT
57200-001	100	mi	B.H.S. 1 Unit	.75	75.00
58027-001	1	ea	TD Pump	240.00	240.00
			SUB TOTAL		315.00
			Gallons License Fee		
			Gallons License Fee		
	%		Tax on $		
	%		Tax on $		
			TOTAL	$	

DOWELL ENGINEER _____ PAYROLL INITIALS KAC

RECEIPT: The undersigned hereby certifies that the materials and equipment listed above were received and the services were performed in a workmanlike manner.

CUSTOMER BY _____ AUTHORIZED AGENT

DWL 260-G Printed in U.S.A.

DOWELL

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

CUSTOMER

SERVICE AND INVOICE NUMBER 1503-4960

TERMS: NET 30. ADD LEGAL INTEREST THEREAFTER.

Please indicate on all remittances and send to: **1579 EAST 21 STREET TULSA, OKLAHOMA 74114**

SERVICE ORDER RECEIPT AND INVOICE

DATE	CUSTOMER ORDER NO.	SHIPPED VIA	SERVICE FROM DOWELL STATION	OUTPOST
December 11, 1968		Dowell Truck	[illegible]	

WELL NAME AND NUMBER	LOCATION AND POOL
Huber #3	[illegible] Poplar
COUNTY, CITY (IF WITHIN CITY LIMITS) & STATE	**TYPE OF SERVICE**
Roosevelt, Montana	Acid

CUSTOMER'S NAME: E. A. Polumbus Jr.

ADDRESS: 414 Patterson Building

CITY, STATE AND ZIP CODE: Denver, Colorado 80202

SERVICE INSTRUCTIONS:

ITEM NO.	QUANTITY	UNIT	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT PRICE	AMOUNT
[illegible]	1	Ea	TD Pump	258.00	258.00
[illegible]	250	Gal	Dowell X	.33	82.50
[illegible]	2	Gal	Inhibitor	2.50	5.00
[illegible]	1	Gal	W Service	[illegible]	[illegible]
[illegible]	1	Gal	F Service	[illegible]	[illegible]
			SUB TOTAL		769.50
		Gallons	License Fee		
		Gallons	License Fee		
%			Tax on $		
%			Tax on $		
				TOTAL	$

FRACTURING LICENSE FEE STATEMENT: Must be signed ONLY if the fracturing license fee does not apply because the fracturing fluid used in this treatment was either:

1 - Unthickened water or acid.

2 - Crude oil produced from the same formation in the same field as the well being treated.

EXEMPT-GAL.

CUSTOMER BY [signature] AUTHORIZED AGENT

SERVICE ORDER

IMPORTANT: SEE OTHER SIDE FOR TERMS & CONDITIONS

I have read, understood and agreed to the terms and conditions printed on the reverse side hereof and represent that I have full authority to accept same and sign this order.

CUSTOMER BY [signature] AUTHORIZED AGENT

[redacted]

DOWELL ENGINEER [signature] PAYROLL INITIALS [signature]

RECEIPT: The undersigned hereby certifies that the materials and equipment listed above were received and the services were performed in a workmanlike manner.

CUSTOMER BY [signature] AUTHORIZED AGENT

DWL 260-G Printed in U.S.A.

TREATMENT REPORT

DWL-494-I PRINTED IN U.S.A.

DOWELL DIVISION OF THE DOW CHEMICAL COMPANY

DATE: 6-15-68

WELL NAME AND NUMBER: Huber #3	LOCATION:	CUSTOMER REPRESENTATIVE: MR Hardesty	TREATMENT NUMBER:
POOL: Poplar	FORMATION: B-1	JOB DONE DOWN TUBING A ☐ CASING B ☐ ANNULUS C ☐	ALLOWABLE PRESSURE TSG: 1000 CSG:
COUNTY: Roosevelt	STATE: Mont.	TYPE OF WELL OIL A ☑ GAS B ☐ WATER C ☐ INJ. D ☐	
TYPE OF SERVICE: Acid		AGE OF WELL NEW WELL A ☑ REWORK B ☐	TOTAL DEPTH: 5626 CIRC. BHT.
CUST. NAME: E.A. Polumbus JR.		CASING SIZE: 5 1/2" CASING DEPTH:	TUBING SIZE: 2 1/2" TUBING DEPTH: 5615
ADDRESS: 220 C.A. Johnson Bldg.		LINER SIZE: LINER DEPTH:	PACKER TYPE: — PACKER DEPTH: —
CITY, STATE & ZIP CODE: Denver 2, Colo. 80202		OPEN HOLE: CSG. OR ANRL. VOL.:	TBG VOLUME: 31.9 STATIC BHT.

REMARKS: Acidize w/250 XFW

FOR CONVERSION PURPOSES 24 BBLS EQUALS 1000 GALLONS

ARRIVED ON LOCATION: 6:30 AM

PERFORATED INTERVALS

DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES	DEPTH	NO. OF HOLES
5626-	Notch				

TIME	INJECTION RATE	INJECTION BBLS IN	PRESSURE CSG.	PRESSURE TBG.	SERVICE REMARKS
7:00					Test Lines, o.t. Hold Safety Meeting
7:10					Start water to Fill Hole
7:15					Well Full, Start 250 XFW to Spot
7:28					Acid on Spot - Close Csg. Valve
7:23				100	Start Pump Slow
7:26	.3	1		450	Press check
7:29	.3	2		600	Press check
7:38	.3	5		650	Press check
7:41	.3	6		650	Acid Displaced - Stop Pump - Job Complete
				6.00	I.S.D.P. -
					Vac in 6 min

TIME LEFT LOCATION: 8:00	AVG. LIQUID INJ. RATE	ADJ. INJ. RATE (SOLIDS INC.)	TOTAL FLUID PUMPED OIL / WATER	PROPS AND LIQUIDS INJECTED
MAX. PRESSURE	AVG. PRESSURE	FINAL PUMP IN PRESSURE	SHUT IN PRESSURE IMMEDIATE / 15 MINUTE	

TYPE	SIZE OR PURPOSE	AMOUNT
XFW	Acid	250 Gal

DOWELL LOCATION: Glendive, Mont.

DOWELL ENGINEER: Lewis Carver

CALL BACK	DATE	CUSTOMER REP. CONTACTED	CUSTOMER CONSIDERED SERVICE ☐ SATISFACTORY ☐ UNSATISFACTORY ☐ UNKNOWN	PROD. BEFORE TREATMENT ☐ TEST ☐ ALLOWABLE	PROD. AFTER TREATMENT DAYS ☐ TEST ☐ ALLOWABLE

STIMULATION SERVICE
TREATING REPORT
FORM 1310

HALLIBURTON DISTRICT Glendive, Mont. STAGE NO. One
HALLIBURTON DIVISION Denver PAGE NO. One

FIELD	SEC.	TWP.	RNG.	COUNTY	STATE
East Poplar	10	28N	51 E	Roosevelt	Mont

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
5-14-69 DATE 1800 TIME	5-15-69 DATE 0600 TIME	5-15-69 DATE TIME	5-15-69 DATE TIME

MATERIALS USED

TYPE JOB Acid Job
TREAT. FLUID ____ DENSITY ____ LB/GAL.-°API
DISP. FLUID S. Water DENSITY ____ LB/GAL.-°API
PROP. TYPE ____ SIZE ____ LB. ____
PROP. TYPE ____ SIZE ____ LB. ____
ACID TYPE Reg HCl GAL. 250 % 15
ACID TYPE ____ GAL. ____ %
ACID TYPE ____ GAL. ____ %
SURFACTANT TYPE ____ GAL. ____ IN ____
NE AGENT TYPE 14 N GAL. 1 IN 250 Gal
FLUID LOSS ADD. TYPE ____ GAL.-LB. ____ IN ____
GELLING AGENT TYPE ____ GAL.-LB. ____ IN ____
FRIC. RED. AGENT TYPE ____ GAL.-LB. ____ IN ____
BREAKER TYPE ____ GAL.-LB. ____ IN ____
BLOCKING AGENT TYPE ____ GAL.-LB. ____
PERFPAC BALLS TYPE ____ NO. ____
OTHER MATERIALS Hai-50 Inhibitor 1 Gal

HYDRAULIC HORSEPOWER

AVAILABLE ____ USED ____

AVERAGE RATES IN BPM

TREATING .5 DISPL. 5 OVERALL 5

PRESSURES IN PSI

BREAKDOWN 2100 - 1800 MAXIMUM 2100
AVERAGE 1850 DISPLACEMENT 1800
SHUT-IN: INSTANT 1700 5-MIN. 1500 15-MIN. 1300
FRACTURE GRADIENT ____

VOLUMES

LOAD & BKDN: BBL.-GAL. ____ PAD: BBL.-GAL. ____
TREATMENT: BBL. ~~GAL.~~ 6 DISPL: BBL. ~~GAL.~~ 31.5
TOTAL BBL. ~~GAL.~~ 37.5

PERSONNEL AND EQUIPMENT

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
T.C. McEntire	11308		Glendive
R.E. Stubbs	31695	8194 T-10	Montana

WELL DATA

FORMATION Heath DATE COMPLETED ____
INIT. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
PRES. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
CASING: SIZE 5½ WEIGHT 14 # DEPTH ____
LINER: SIZE ____ FROM ____ TO ____
OPEN HOLE: SIZE ____ FROM ____ TO ____
PERF: 4848' - 4872'
____ SHOTS/FT. ____ TOTAL NO. ____

CUSTOMER REPRESENTATIVE X Ted Voss
HALLIBURTON OPERATOR T.C. McEntire COPIES REQUESTED

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS T	PUMPS C	PRESSURE - PSI TUBING	PRESSURE - PSI CASING	REMARKS
	0735	Roll Acid						
	0740	Start Pumping Acid	2.0	1	0	0	0	250 Gal 15% Reg.
	0743	Start Pumping Flush	2.0	1	0	0	0	Salt Water
	0752	Tubing Full	¾	1	0	2000	0	24 Bbl Fluid
	0800	Acid Enters Formation	.5	1	0	2100	0	
	0812	250 Gal Acid in Formation	.5	1	0	1800	0	
	0814	1 Bbl over Flush in Formation	.5	1	0	1800	0	

CUSTOMER

CUSTOMER E.J. Palumbus LEASE Huber WELL NO. # 3 DATE 5-15-69

HALLIBURTON
SERVICES
A DIVISION OF HALLIBURTON COMPANY
DUNCAN, OKLAHOMA

FORM 1908

WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO INVOICE & TICKET NO. 73648

DISTRICT Glendive, Montana DATE 5-15-69

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: E.A. Polumbus (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. 3 LEASE Huber SEC. 10 TWP. 28 N RANGE 51 E

FIELD E. Poplar COUNTY Roosevelt STATE Montana OWNED BY E.A. Polumbus

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME Heath TYPE Sand

FORMATION THICKNESS ____ FROM ____ TO ____

PACKER: TYPE R.T.T.S. SET AT 4732'

TOTAL DEPTH ____ MUD WEIGHT ____

BORE HOLE ____

INITIAL PROD: OIL ____ BPD, H_2O ____ BPD, GAS ____ MCF

PRESENT PROD: OIL ____ BPD, H_2O ____ BPD, GAS ____ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	used	14#	5½	0		0
LINER						
TUBING	used	6.4	2 7/8	0	4737	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS				4848	4872	
PERFORATIONS						

PREVIOUS TREATMENT: DATE ✓ TYPE ____ MATERIALS ____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☐ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDERED ____

Swab Tubing down Pump Acid into Tubing - Displace with Salt Water ½ Bbl min - over Flush 1 Bbl

CUSTOMER OR HIS AGENT STATES THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

(a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.

(b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.

(c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.

(d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.

(e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.

(f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or services.

(g) At Customer's expense, to recover any Halliburton equipment, tools or instruments which are lost or damaged in the well, and if recovery cannot be had, to pay Halliburton for such equipment, tools or instruments unless such loss or damage is caused by the negligence of Halliburton.

(h) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. There are no warranties, express or implied, of merchantability, fitness or otherwise which extend beyond those stated in the immediately preceding sentence. Halliburton limits its liability for breach of any warranty or for damages resulting from its negligence with respect to the use of such products, supplies or materials to the replacement of such products, supplies or materials on their return to Halliburton, or at Halliburton's option, to the allowance to Customer of credit for the cost of such products, supplies or materials.

(i) Upon Customer's default in the payment of Customer's account 60 days after receipt of invoice, such account will be subject to interest after date of invoicing until paid. In the event it becomes necessary to employ an attorney to enforce collection of such account, Customer agrees to pay all collection costs and attorney fees in the amount of 20 per cent of the amount of the unpaid account.

(j) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED Ted Wells
CUSTOMER

DATE 5-15-69

TIME 7:00 A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER

HALLIBURTON SERVICES
STIMULATION SERVICE
TREATING REPORT
FORM 1910

HALLIBURTON DISTRICT Glendive, Mont. ATTACH TO TICKET NO. 73692
HALLIBURTON DIVISION Denver STAGE NO. Two
PAGE NO. Two

CUSTOMER E.A. Polumbus LEASE Huber WELL NO. #3 DATE 5-16-67

FIELD	SEC.	TWP.	RNG.	COUNTY	STATE
E. Poplar	10	28 N	51 E	Roosevelt	Mont

CALLED OUT DATE TIME	ON LOCATION DATE TIME	JOB STARTED DATE TIME	JOB COMPLETED DATE TIME

MATERIALS USED

TYPE JOB Acid Job & Treated Oil
TREAT. FLUID ____ DENSITY ____ LB/GAL.-°API
DISP. FLUID Crude DENSITY ____ LB/GAL.-°API
PROP. TYPE ____ SIZE ____ LB. ____
PROP. TYPE ____ SIZE ____ LB. ____
ACID TYPE Reg HCl GAL. 500 % 15
ACID TYPE ____ GAL. ____ %
ACID TYPE ____ GAL. ____ %
SURFACTANT TYPE NE-510 GAL. 35 IN 180 Bbl
NE AGENT TYPE 14 N GAL. 2 IN 500
FLUID LOSS ADD. TYPE ____ GAL.-LB. ____ IN ____
GELLING AGENT TYPE ____ GAL.-LB. ____ IN ____
FRIC. RED. AGENT TYPE ____ GAL.-LB. ____ IN ____
BREAKER TYPE ____ GAL.-LB. ____ IN ____
BLOCKING AGENT TYPE ____ GAL.-LB. ____
PERFPAC BALLS TYPE ____ NO. ____
OTHER MATERIALS HAI-50 (Inhibitor) 2 Gal.

HYDRAULIC HORSEPOWER

AVAILABLE ____ USED ____

AVERAGE RATES IN BPM

TREATING 4 DISPL. 4.5 OVERALL 4

PRESSURES IN PSI

BREAKDOWN 2700-2600 MAXIMUM 2800
AVERAGE 2700 DISPLACEMENT 2800
SHUT-IN: INSTANT 2300 5-MIN. 2200 15-MIN. 2000
FRACTURE GRADIENT ____

VOLUMES

LOAD & BKDN: BBL.-GAL. ____ PAD: BBL.-GAL. ____
TREATMENT: BBL.-~~GAL.~~ 172 DISPL: BBL.-~~GAL.~~ 200
TOTAL BBL.-~~GAL.~~ 212

PERSONNEL AND EQUIPMENT

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
T.C. McEntire	11308		Glendive
J. Brophy		8194 T-10	Montana
J. Charles			"
D. Feldman			"
J. Matteson			Casper, Wyo

WELL DATA

FORMATION Nesth DATE COMPLETED ____
INIT. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
PRES. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
CASING: SIZE 5½" WEIGHT 14# DEPTH ____
LINER: SIZE ____ FROM ____ TO ____
OPEN HOLE: SIZE ____ FROM ____ TO ____
PERF: 4848 - 4872
____ SHOTS/FT. ____ TOTAL NO. ____

CUSTOMER REPRESENTATIVE X Ted Weeks
HALLIBURTON OPERATOR T.C. McEntire COPIES REQUESTED

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS T	PUMPS C	PRESSURE - PSI TUBING	PRESSURE - PSI CASING	REMARKS
	0921	Start Pumping Acid	3.0	1	0	0	0	500 Gal 15% Reg.
	0925	Start Pumping Crude	3.0	1	0	0	0	200 Bbl Treated
	0930	Tubing Full	3.0	1	0	150	0	.04% HyClo
	0931	Acid on Perforations	2.5	1	0	2500	0	
		Increase Rate To 3 Bbl/min	3.0	1	0	2600	0	
		Increase Rate to 3.75 Bbl/min	3.75	1	0	2700	0	
	0933	250 Gal in Formation (Acid)	3.75	1	0	2600	0	
		Increase Rate To 4.25 Bbl/min	4.25	1	0	2700	0	
	0935	500 Gal Acid in Formation	4.25	1	0	2700	0	
		Increase Rate To 4.5 Bbl/min.	4.5	1	0	2800	0	
	1015	Treated Crude in Formation	4.5	1	0	2800	0	
		Crude Treated with .04% HyClo						

HALLIBURTON SERVICES
STIMULATION SERVICE
TREATING REPORT
FORM 1910

HALLIBURTON DISTRICT Glendive, Mont. ATTACH TO TICKET NO. [illegible]
HALLIBURTON DIVISION Denver STAGE NO. Three
PAGE NO. Three

CUSTOMER E. A. Columbus LEASE Huber WELL NO. # 3 DATE 5-17-69

FIELD	SEC.	TWP.	RNG.	COUNTY	STATE
E. Poplar	10	28 N	51 E	Roosevelt	Montana

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
5-17-69 DATE 0300 TIME	5-17-69 DATE 0630 TIME	5-17-69 DATE TIME	5-17-69 DATE TIME

MATERIALS USED

TYPE JOB Water Frac (Huber Lease Water)
TREAT. FLUID ____ DENSITY ____ LB/GAL.-°API
DISP. FLUID Water DENSITY ____ LB/GAL.-°API
PROP. TYPE Sand SIZE 20-40 LB. 7500
PROP. TYPE Sand SIZE 10-20 LB. 2,000
ACID TYPE ____ GAL. ____ %
ACID TYPE ____ GAL. ____ %
ACID TYPE ____ GAL. ____ %
SURFACTANT TYPE ____ GAL. ____ IN ____
NE AGENT TYPE 14 N GAL. 40 IN 408 Bbl
FLUID LOSS ADD. TYPE WAC-11 GAL.-LB. 300 IN 15000 Gal
GELLING AGENT TYPE WG-6 GAL.-LB. 300 IN 15000 Gal
FRIC. RED. AGENT TYPE ____ GAL.-LB. ____ IN ____
BREAKER TYPE ____ GAL.-LB. ____ IN ____
BLOCKING AGENT TYPE ____ GAL.-LB. ____
PERFPAC BALLS TYPE ____ NO. ____
OTHER MATERIALS LP-55 Run 1# in First 5500 Gal

PERSONNEL AND EQUIPMENT

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
T.C. McEntire	11304		Glendive Mont.
J. Brophy			
J. Matteson		6398 HT-400	Cas Per Wyoming
R. Morley		5025 Sand Tech	Glendive Mont.
C. Erickson		6343 Blender	Glendive Mont.
J.			Gillette Wyoming

HYDRAULIC HORSEPOWER

AVAILABLE 1000 USED 1011

AVERAGE RATES IN BPM

TREATING 12.5 DISPL. 12.5 OVERALL 12.5

PRESSURES IN PSI

BREAKDOWN 3200 - 3000 MAXIMUM 3800
AVERAGE 3300 DISPLACEMENT 3800
SHUT-IN: INSTANT 2000 5-MIN 1800 15-MIN. 1500
FRACTURE GRADIENT ____

VOLUMES

LOAD & BKDN: BBL.-GAL. ____ PAD: ~~BBL.~~-GAL. 3000
TREATMENT: ~~BBL.~~-GAL. 17,000 DISPL: BBL.-~~GAL~~ ~~395~~ 35
TOTAL BBL.-~~GAL~~ 395

WELL DATA

FORMATION Mesa DATE COMPLETED ____
INIT. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
PRES. PROD: OIL ____ BPD; WATER ____ BPD; GAS ____ MCF
CASING: SIZE 5½ WEIGHT 14 # DEPTH ____
LINER: SIZE ____ FROM ____ TO ____
OPEN HOLE: SIZE ____ FROM ____ TO ____
PERF: 4848' - 4872'
____ SHOTS/FT. ____ TOTAL NO. ____

CUSTOMER REPRESENTATIVE X Ted Voss
HALLIBURTON OPERATOR T.C. McEntire COPIES REQUESTED ____

TREATING LOG

CHART NO.	TIME	OPERATION AND/OR AMOUNT AND TYPE FLUID PUMPED	RATE BPM	PUMPS T	PUMPS C	PRESSURE - PSI TUBING	PRESSURE - PSI CASING	REMARKS
	1135	Prime Pumps						
	1136	START Pumping Gel Pad	12	2	0	0	0	3000 Gal
	1142	START Sand	12	2	0	3100	0	20-40 ½ # Gal
	1144	20-40 Sand on Formation	13.5	2	0	3200	0	½ # Gal
	1146½	Increase 20-40 Sand To ¾# Gal						
	1148½	20-40 Sand on Formation	13.0	2	0	3300	0	¾ # Gal
	1153½	Increase 20-40 Sand To 1# Gal	12.5	2	0	3200	0	
	1156	20-40 Sand on Formation	12.5	2	0	3200	0	1# Gal
	1159	START 10-20 Sand 1# Gal	12.5	2	0	3200	0	
	1201½	10-20 Sand on Formation	12.0	2	0	3200	0	
	1205	START Flush	12.0	2	0	3000	0	35 Bbl Displace
	1208	End Job	12.0	2	0	3200	0	

CUSTOMER

JOB NO. F&C 19291

HOMCO

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

WORK ORDER

(TO BE SIGNED BEFORE WORK IS BEGUN)

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT I HAVE FULL AUTHORITY TO AUTHORIZE HOMCO TO PERFORM SERVICES ON THIS WELL AND TO OBLIGATE THE CUSTOMER NAMED BELOW TO PAY FOR SAME. IT IS UNDERSTOOD THAT SUCH SERVICES WILL BE PERFORMED UPON THE TERMS AND CONDITIONS PRINTED ON THE BACK OF THIS FORM.

CUSTOMER E.A. Polumbus, Jr. BY [signature] DATE 3-13-65 WITNESS [signature]

FISHING & CUTTING SERVICE REPORT

DATE	STATE	COUNTY	FIELD	LEASE	WELL	SERVICE LOCATION
3-13-65	Mont.	Roosevelt	Poplar	Huber	#3	Williston

CHARGE TO E.A. Polumbus, Jr.

ADDRESS 414 Patterson Bldg., Denver, Colorado

SUPERVISOR'S TIME: DAYS, FROM 3-13-65 6 A.M., THRU P.M. A.M. @ — TOTAL

CAR NO. G 7024 SUPERVISOR'S AUTO MILEAGE WITH TRAILER: 160 MILES @ .20 — 32 00

HOLE – OPEN ☐ CASED ☑ HOLE SIZE 5½"

TYPE OF JOB Wash-over DEPTH OF JOB 2850'

TYPE OF FISH 2⅞" EUE. Tbg. OTHER SERVICES

Departed from Williston at 6⁰⁰ am. M.S.T. & arrived on location at 7²⁰ am. Crew was pulling tbg. string following back-off at 2842' of the 3-12-65. Out of hole at 8³⁰ am.

Picked-up tools consisting of the following:

One 4½" Hyd. F.J. Dog-tooth rotary shoe T-214 (2.0'), One 4½" Hyd W.P. Box X 4½" Hyd. F.J. Pin Bushing (1.77') #T-997, 2 joints of 4½" Hyd. W.P. wash-over pipe (63.28'), One 2⅞" Acme Reg. box X 4½" Hyd. W.P. Pin Bushing (.95) #T-996, One 2⅞" API Reg. box X 2⅞" Acme Reg. Pin Sub (.63') #T-61, One set 2⅞" Reg. Bowen Oil Jars 6.47' #2945 (3/4" I.D.), One 2½" EUE. box X 2⅞" Reg. Pin Sub (.72') #T-814, One 2½" EUE. Pup-joint (6.05').

Start in hole at 9⁰⁰ am. Strapped tbg. going in hole.

Over fish at 10¹⁵ am. Point of back-off by tbg. tally – 2845'

10¹⁵ am. – Rigged-up power-sub & circulating pump.

Weight of tools & tbg. string 16,500#.

Started circulating at 11³⁰ am. Washed-over from 2855' to 2856'. No shale in returns.

Start out of hole at 1 P.M. Out at 2¹⁵ P.M.

Rotary shoe impressions or wear indicated csg. to be less than 4⅝" I.D. at depth of 2856'. Portion of

SEE TERMS AND CONDITIONS ON BACK

FGC JOB NO. 19291

CUSTOMER

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

one tooth was missing.

Stood Washover pipe in derrick & picked-up the following tools:

- One 4 11/16" O.D. Bowen Overshot # T-1158 w/ 3 21/32" Spiral Grapple.
- One 2 7/8" A.P.I. Reg. box X 2 1/2" E.U.E. Pin Sub. # T-813
- One Set 2 7/8" Reg. HOMCO Bumper Jars. # Z-3335.
- One Set 2 7/8" Reg. Bowen Oil Jars. # 2945.
- One 2 3/8" I.F. Mod. Box X 2 7/8" API. Reg. Pin Sub. # T-1038.
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars. Total feet - 180.42.
- One 2 1/2" E.U.E. Box X 2 3/8" I.F. Mod. Pin Sub. # XL-369.

Total length of tools & drill Collars - 195.83.
Total length of tbg. in derrick - 2774.28.

Start in hole at 3^30 P.M. To top of fish at 4 P.M. Engaged fish & jarred on same for 1/2 hour w/o results. Wt. of fishing string - 26,000#. Pulled to 65,000# for jarring. Released overshot.

Start out of hole at 4^45 P.M. Out at 5^30 P.M. Stand-back drill collars & laid down tools. Trip back in hole w/ tbg. string only.

Secure rig for the night.

3-14-65

On location at 7 am.
Screwed into fish approx 4 rounds.
Ran 2 3/8" W.P.Q. Jet Cutter.
Severed tbg. at 2907' or 8" above center of coupling. 8^30 a.m. Out w/ wireline at 9^00 a.m.
Screwed-out of fish & started out w/ tbg. string at 9^15 a.m. Out at 10^50 a.m.

Picked up tools, consisting of the following:
- One 4 11/16" O.D. Bowen Overshot # T-1158 w/ same 3 21/32" Spiral Grapple used on 3-13-65.

PAGE 2 OF ____ SERVICE REPORT PAGES FOR JOB NO. ____
CUSTOMER E.A. Plumbus Jr. BY [signature] DATE 3-13-65 WITNESS W.A. Willi[illegible]

SEE TERMS AND CONDITIONS ON BACK

CUSTOMER

JOB NO. 19299

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

- One 2 7/8" A.P.I. Reg. box X 2 1/2" E.U.E. Pin Sub. # T-813.
- One Set 2 7/8" Reg. HOMCO Bumper Jars. # Z-3335.
- One Set 2 7/8" Reg. Bowen Oil Jars. # 2945.
- One 2 3/8" I.F. Mod. box X 2 7/8" A.P.I. Reg. Pin Sub. # T-1038.
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars - 180.42'
- One 2 1/2" E.U.E. box X 2 3/8" I.F. Mod. Pin Sub. # XL-369.

Total length of Drill Collars & Tools - 195.83'.
Total length of tbg. in derrick - 2774.28'.

Start in hole at 10:25 a.m., 3-14-65
Engaged fish at 11:00 a.m. Weight of fishing string - 35,000#.
Started jarring at 11:05 a.m. - Jarred 1 1/2 hrs., at which time jars became inoperative. Had been "tripping" jars at 65,000#. Jarred string (fish) for approx. 3 1/2 hours - total time. Moved fish 5.5' up hole. Released overshot & started out at 4:15 p.m. Completed trip out & secured operations for the night. Out of hole at 5:45 p.m.

3-15-65

On location at 7 a.m.
Changed-out Jars (Oil). Checked-out 3 21/32" Spiral grapple in overshot. Grapple O.K. Install new pack-off rubber.

Picked-up the following tools:

- One 4 1/16" O.D. Bowen O'shot # T-1158 w/ same grapple as previous runs.
- One 2 7/8" A.P.I. Reg. box X 2 1/2" E.U.E. Pin Sub. # T-813
- One Set 2 7/8" Reg. HOMCO Bumper Jars. # Z-3335
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557 (6.45')
- One 2 3/8" I.F. Mod. box X 2 7/8" A.P.I. Reg. Pin. # T-1038.
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars. Length - 180.42
- One 2 1/2" E.U.E. box X 2 3/8" I.F. Mod. Pin Sub. # XL-369

Total length of Drill Collars & Tools - 195.81'.
A 2' pup-joint run on top of tools.
Total length of tbg. in derrick - 2774.28

PAGE 3 OF ___ SERVICE REPORT PAGES FOR JOB NO. _____

CUSTOMER F.O. Petroleum Inc. BY A.M. Pate DATE 3-14-65 WITNESS _____

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CUSTOMER

JOB NO. 19291

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

Start in hole w/ tbg. at 7 45 a.m.
Top of fish at 2839.5' when released at 4 15 P.M. of 3-14-65. Bottom of fish at 2901.5'. This places coupling at 2870.5' or 14.5' below original free-point of tbg. Casing string partially collapsed at 2856', but not in against tbg. string. Partially against tbg. string at 2858'. This is 2' below free-point & 11.5' above tbg. coupling of present fish.

In hole & engaged fish at 8 20 a.m. Wt. of fishing string 25,000#.
Started jarring at 8 30 a.m.
Jarred til 9 30 a.m. w/o results. 40,000# over wt. of fishing string.
Rigged-up for circulation. Started circulating at 10 15 a.m.
Getting small amount of returns. 10 20 a.m. 900 P.S.I.
Getting good returns at 10 25 a.m. String worked 10,000# to 30,000#. Circulated til 10 50 P.m. Jarred fish from 10 55 a.m. til 11 20 a.m., making 12". Total of 78" of fish jarred up hole. Circulated from 11 25 a.m. til 12 noon, getting shale particles in returns. Started jarring fish at 12 noon, 3-15-65. Jarred til 12 15 P.m., for 4" increase. Circulated from 12 16 P.m. til 12 25 P.m. - Jarred from 12 25 P.m. til 1:20 P.m., making 24". This is a total of 52" since 8 30, this a.m. Circulated from 1 25 P.m. til 1 40 P.m. Jarred from 1 40 P.m. til 2 05 P.m. for total of 64" since 8 30 a.m. at which time fish became free w/ drag for approx. 2.5'.
Start out of hole at 2 10 P.m. w/ fish. Out at 3 P.m.
Recovered 62' of 2 7/8" E.U.E. tbg.
Removed O'shot from string & picked-up the following tools:
- One 4 1/4" O.D. Swadge # W-2424. 3.76" in length w/ 2 5/8" nose.
- One Set 2 7/8" Reg. HOMCO Bumper Jars, # Z-3335.
- One Set 2 7/8" Reg. Bowen Oil Jars, # 3557.
- One 2 3/8" I.F. Mod. box X 2 7/8" Reg. Pin Sub. # T-1038.
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars. Length - 180.42'.

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CUSTOMER F.D. Palumbus Jr. BY R. M. Ortiz DATE 3-15-65 WITNESS ____

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

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- One 2½" E.U.E. box x 2 3/8" I.F. Mod. Pin Sub. "XL-369.
A 2' pup-joint run in at top of tools.
Total length of tbg. in derrick - 2~~[illegible]~~86'.

Start in hole at 4:50 P.M. In hole at - 4:25 P.M.
Contact light place at 2858', but eased thru & set-down at 2864'.
Swadged from 2864' to 2886'. Shut-down at 6 P.M. & secured rig for the night allowing removal of two joints (63') of tbg. from hole.

3-16-65

On location at 7:10 a.m. Same tools as of 3-15-65. Picked-up two joints of tbg. & lowered swadge back to 2866' & started swadging at 7:45 a.m. Swadged til 8:30 a.m. W/O results. 2886'.

9:30 a.m. Rigging-up to circulate.
Circulated from 10:10 a.m. til 10:35 a.m.
~~swadged from~~
"Shut-down" at 11 a.m. due to inclement weather.

3-17-65

On location at 8:45 a.m. Could not get into location until lease roads were cleared of snow.
Same tools in hole as of 3-15-65 & 3-16-65.
Start swadging at 9 a.m. - Swadging at 2886'.
Swadge til 9:30 a.m. No hole made.
Start trip out at 10 a.m. Out at 11:15 a.m.
Lay-down 4¼" swadge.
Picked-up 2 3/8" E.U.E. tbg. joint w/ shoe-type teeth on bottom in up-set to be run on fishing string for circulating purposes. This was 1:30 P.M., 3-17-65. Length of joint - 30.42'.
Laid-down 3.76 & picked-up 32.12' & a difference of 28.36'.
The following tools are being run in hole:

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CUSTOMER E.H. Columbus, Jr. BY [signature] DATE 3-15-65 WITNESS

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FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

Bottom of string, starting with joint of 2 3/8" Tbg. & 2 3/4" to 2 7/8" Swedge w/ 3 21/32" O.D. Tbg. coupling.
- One 2 7/8" A.P.I. Reg. box X 2 1/2" E.U.E. Pin Sub. # T-813.
- One Set 2 7/8" Reg. HOMCO Bumper Jars. # Z-3335.
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557.
- One 2 3/8" I.F. Mod. box X 2 7/8" A.P.I. Reg. Pin Sub. # T-1038.
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars. Total feet - 180.42'.
- One 2 1/2" E.U.E. Box X 2 3/8" I.F. Mod. Pin Sub. # XL-369.

Total length of drill collars & tools - 180.42' plus 12.41 = 192.83
Tbg Collar (3 21/32"), Swedge (2 3/8" X 2 7/8") & 2 3/8" jt. = 32.12'.
Length of 4 1/4" O.D. Csg. Swedge - 3.76'. Removed from string.

In hole at 2 30 P.M., 3-17-65.
Lowered string to 2900' where it began taking" weight.
Rigged-up for circulating.
Circulated from 3 30 P.M. til 4 00 P.M. - Lowered string to 2909.25'. Top of fit-cut originally at 2907'.
Could not get below 2909.25'.
Started trip out at 4 05 P.M. Out at 5 05 P.M.
Lay down joint of 2 3/8" Tbg. & picked-up the following tools:
- One 3 7/8" O.D. X 2 7/8" Reg. box Csg. Swedge - 3.01'
- One 2 7/8" Acme box X 2 7/8" Reg. Pin Sub. # T-682. .77'
- One 2 7/8" Acme Reg. HOMCO Super Safety-Joint. # 4739. 1.85'
- One 2 7/8" Reg. box X 2 7/8" Acme Reg Pin Sub. # T-61 .63'
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557 4.65'
- One Set 2 7/8" Reg. HOMCO Bumper Jars. # Z-3335. 4.08'
- One 2 3/8" I.F. Mod. box X 2 7/8" Reg. Pin Sub. # T-1038 1.05'
- ~~On~~ Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars. 180.42
- One 2 1/2" E.U.E. box X 2 3/8" I.F. Mod. Pin Sub. # XL-369 .68

Total D.C.s. & tools ~~196.54~~
Start in hole at 6:05 P.M., 3-17-65 197.14
Secured rig for the night w/ tools & drill collars in hole.
This was 7 30 P.M.

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CUSTOMER E.H. Palumbos Jr. BY [signature] DATE 3-17-65 WITNESS [signature]

CUSTOMER

JOB NO. 19291

HOMCO

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

3-18-65

On location at 7 am.

Continue w/ trip in hole at 7:20 am.

In hole at 8:35 am.

Started swadging at 8:45 am.

Swadged thru tight-place at 2886'-88'. Lowered tools to 2908.5' w/o difficulty. Taking weight at this depth. Start out of hole w/ 3 7/8" O.D. Swadge - 9:15 am. Out at 10:30 am.

Lay down 3 7/8" O.D. Swodge (3.01') Sub (.77'), Safety Jt. (4.85') & Sub (.63').

Picked-up 2 7/8" Tbg. Spear. (3.97')

Start in hole at 10:45 am. w/ the following tools:

- One 2 7/8" Reg. Bowen Tbg. Spear w/ 2 7/8" grapple.	3.97'
- One 2 7/8" Ammo Reg. HOMCO Bumper Jars. #Z-3335	4.08'
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557	4.65
- One 2 3/8" I.F. Med. box X 2 7/8" Reg. Pin Sub. # T-1038	1.05
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Med. Drill Collars.	180.42
	194.17
- One 2 1/2" E.U.E. box X 2 3/8" I.F. Med. Pin Sub #XL-369	.68
Total tools this run —	194.85'
Total tools w/ swadge run	197.14'
Total amount 2 7/8" Tbg. run in hole	2713.39'
	2908.24
Top of fish - by swadge run —	2908.50

In hole at 12 noon.

Rigged-up to circulate at top of fish. Crew eating lunch - 12:15 pm. til 12:45 pm.

Circulate from 1:00 pm.

Engaged fish w/ spear & pulled approx 25,000# above weight of entire string before fish became free or became free of drag. Moved about 8' up hole.

Start trip out at 1:45 P.M.

To top of fish at 4:30 pm. Top joint plugged w/ shale.

Complete trip out w/ fish. Pulling out string.

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CUSTOMER E.P. Palumbo BY Louis ... DATE 3-18-65 WITNESS ...

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CUSTOMER

JOB NO. 19291

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

Cut off hole at 6:15 P.M., 3-18-65.
Recovered 43 stands w/ 6' perforated nipple. Bottom joint of mud anchor is built-plugged.
Secured rig for the night. Total of 178 joints on location.

3-19-65

On location at 7 a.m.
Picked up the following tools:

- One 4" O.D. X 2 7/8" Reg. box Swadge. # T-294	1.63'
- One 2 7/8" Reg. HOMCO Super Safety-Joint # 4239	1.85'
One 2 7/8" API. Reg. box X 2 7/8" Reg. Pin Sub. # T-61	.63'
One Set 2 7/8" Reg. HOMCO Bumper-Jars. # Z-3335.	4.08'
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557	4.65'
- One 2 3/8" I.F. Mod. box X 2 7/8" Reg. Pin Sub. # T-1038.	1.05'
- Six (6) 3 1/2" O.D. X 2 3/8" I.F. Mod. Drill Collars	180.42'
- One 2 1/2" E.U.E. box X 2 3/8" I.F. Mod. Pin Sub. # XL-369	.68
Total tools & drill collars -	194.99'
A 2 7/8" E.U.E. X 2' pup-joint at top of collar string.	2.00
Amount of 2 7/8" tbg. in derrick (Fishing String)	2848.49'
Start trip in hole at 7:45 a.m.	2845.48'
In hole at - 9 a.m. (One stand left in derrick)	
Picked-up tbg. on ground.	62.90
Run-in stand in derrick -	60.89
Had tight-place at 2886' (Lost 4000# wt. only)	2971.27
Lowered 4" Swadge to 2969' w/o drag.	
Start out of hole w/ Swadge at 9:20 a.m.	
Out of hole at - 10:30 a.m.	
Lay down 4" O.D. Swadge.	1.63'
Pick-up 4 1/2" O.D. Swadge.	3.16'
Start in hole at 11:00 a.m. w/ the following tools:	
- One 4 1/2" O.D. X 2 7/8" Reg. box Csg. Swadge. # T-1009	3.16'
- One 2 7/8" Reg. HOMCO Super Safety-Joint. # 4239	1.85'
- One 2 7/8" API. Reg. box X 2 7/8" Reg. Pin Sub. # T-61	.63'
- One Set 2 7/8" Reg. HOMCO Bumper-Jars. # Z-3335	4.08'
- One Set 2 7/8" Reg. Bowen Oil Jars. # 3557	4.65'

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CUSTOMER E.A. Palumbus, Jr. BY [signature] DATE 3-19-65 WITNESS [illegible]

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JOB NO. 19291

HOMCO

HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

Total of Tools from page 2	14.37
- One 2 3/8" I.F. Mod. box x 2 7/8" Reg. Pin Sub. # T-1038	1.05
- Six (6) 3 1/2" O.D. x 2 3/8" I.F. Mod. Drill Collars.	180.42
- One 2 1/2" E.U.E. box x 2 3/8" I.F. Mod. Pin Sub. # XL-369	.68
Total tools & drill collars -	196.52
A 2 7/8" E.U.E. x 2' pup joint at top of collar string	2.00
Total amount of tbg. in derrick (fishing string)	2648.49
	2847.01
In hole - 11 55 a.m., 3-19-65	9.00
Tagged tight - place at 2656, 2664	2856.01
& 2884-86. Lowered swedge to 2969.	
Crew ate lunch - 12 15 p.m. til 12 45 p.m.	
Start out of hole at 12 55 p.m. Stand back 2 (singles) of grown.	
Out of hole at - 2 00 p.m. Laid down 4 1/2" O.D. Swedge.	
"Whipstock" 4 3/4" O.D. Swedge out of Williston. Ordered at	
12 20 p.m. On location at 2 05 p.m. (Rental Service)	
Start trip in hole at 2 30 p.m.	
Picked up the following tools:	
- One 4 3/4" O.D. x 2 7/8" Reg. box Csg. Swedge.	4.50
- One 2 7/8" ~~Reg. Lug~~ x Acme box x 2 7/8" Reg Pin Sub. # H-615	.68
- One 2 7/8" Acme Reg. Homco Super Safety joint. #4239	1.65
- One 2 7/8" A.P.I. Reg. box x 2 7/8" Acme Pin Sub. # T-61	.63
- One Set 2 7/8" Reg. Homco Bumper Jars. # Z-3335	4.68
- One Set 2 7/8" Reg. Bowen Oil Jars. #3557	4.65
- One 2 3/8" I.F. Mod. box x 2 7/8" Reg. Pin Sub. # T-1038	1.05
- Six (6) 3 1/2" O.D. x 2 3/8" I.F. Mod. Drill Collars.	180.42
- One 2 1/2" E.U.E. box x 2 3/8" I.F. Mod. Pin Sub. # XL-369	.68
Total tools & drill collars -	198.54
A 2 7/8" E.U.E. Pup joint at top of collar string.	2.00
Total amount of tbg. (fishing string) in derrick.	2648.48
	2849.03
In hole at 3 25 p.m.	
Eased thru tight place from 2656' to 2666'.	
Tight place at 2656' required 8,000# over weight to pull back	
thru same. Had to bump thru 2656' following 1st trip thru.	

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CUSTOMER F.O. Columbus Jr. BY [signature] DATE 3-19-65 WITNESS [illegible]

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CUSTOMER

JOB NO. 19291

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HOUSTON OIL FIELD MATERIAL COMPANY, INC.

FISHING AND CUTTING SERVICE REPORT CONTINUATION SHEET

Tight place at 2884'-86' required approx. 8,000# wt. to ease thru' same. Free below 2886'. Lowered swadge to 2911'. Worked swadge thru tight places for approx. 45 mins.
Start out of hole at 4:45 P.M. w/ 4 3/4" O.D. swadge.
~~Cut at~~
Ran swadge (4 3/4") to approx. 5050'. Continue trip from 2850' at 4:55 P.M. Swadge set down at approx. 4250', 5:30 P.M. Pull string out of hole w/ swadge being left at 2850' or 6' above top tight-place in csg. Up to this depth at 6:00 P.M.
Secure rig for the night.

3-20-65

Ran Retrievable (Halliburton) Bridge Plug & set at 4233'.
Pulled up one stand (2 jts) & set packer.
Spotted sand on B.P.
Tested w/ 1500 P.S.I.
Released packer & pulled same to 2897'.
Set & tested.
Released packer & pulled up hole 2655'.
Set same & squeezed csg.

3-21-65

Pressured to 2000 P.S.I. for "break-down".
Increased gradually to 1500 P.S.I. & 2000 P.S.I. when "break-down" occurred.
Lowered packer to 2755' & set same for "Squeeze". Pressured to 2300 P.S.I. w/ break-down - Held 1400 P.S.I. for 12 mins.
Released Halliburton.

3-22-65

Drilled-out cement to 2856' when obstruction was encountered. Abandoned operations for present.

HOMCO released on 3-19-65.

PAGE 10 OF ______ SERVICE REPORT PAGES FOR JOB NO. 19291

CUSTOMER E.H. Palmubuc [illegible] BY [signature] DATE 3-19-65 WITNESS [signature]

the polumbus co.
Three Park Central Suite 200
1515 Arapahoe Street
Denver, Colorado 80202

303/825-8193

~~CHB~~

to: Dick Higgins *

Think have Engr. look @ reserve + economics of working on this well before proceeding w/ work. After an AFE has been prepared they can determine the economic feasibility. This hole is in about as bad a shape as you will ever find.

MEMORANDUM

DATE: August 10, 1977

TO: R. A. Higgins

FROM: T. Goetz

RE: Huber #3 - Well Repair Program
NE-NW Sec. 10, T28N, R51E
East Poplar Field
Roosevelt County, Montana

Huber #3 was shut-in about July 12, 1977, because the well filled with drilling mud. Rods, pump, and tubing were pulled and laid down.

It is not known whether the mud is entering from above or below the Heath perforations (see attached sketch - Huber #3 Profile). It is not known how much mud will need to be removed to clean up the well.

Also, as shown on the sketch, collapsed tubing at 3,238' was cemented in with 100 sacks common cement. The top of this cement in the annulus has never been determined.

Objective of Well Repair Program

1. Clean hole of drilling mud by circulating with water.

2. Remove tubing in hole to 1 or 2 joints above cement, replace with new tubing, and set pump as close to Heath perforations as possible to reduce back pressure on producing zone.

   As noted from Workover 7/14/76, the twist-off is clean and will accept tools.

Well Repair Program

1. Rig up and run fishing tool to just above twist-off. Rig up pump truck and circulate at least 50 barrels per hour for 6 hours or until hole cleans up.

(continued)

2. After circulation, catch fish, run free point and collar locator, and attempt to shoot off tubing at the second collar above cement or at the point tubing is stuck. If successful, replace with new tubing, tie on with thread-in tool. Swab down hole as far as possible and run mandrel to see if 2¼" pump can be run through collapsed section (determine maximum size tool that can be run).

3. If a 2¼" pump will not run past collapsed section, set pump as low as possible and place well back on production.

TAG

TAG:mb
Attachments

cc: Ted Nees
C. H. Brown

Huber #3 profile

Zones of interest

A zone perfs - 54 -35; 5482-92 (squeezed)

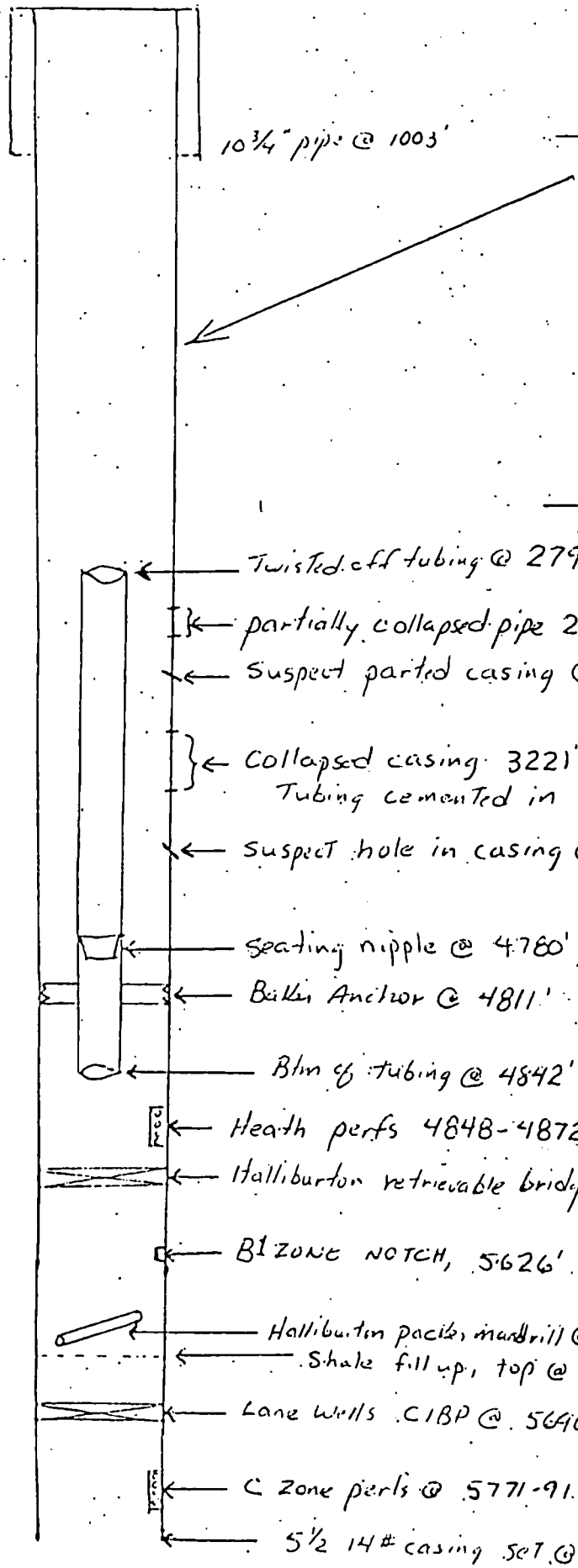
B' zone perfs - 5624-32 (squeezed)

B² zone - (squeezed) (5641-45) 5642-54

B³ zone - Apparently never opened

C zone - 5771-91

JUL 18 1977



STATUS AS OF 7-12-77, well filling up with mud

Madison shut off and Heath completed 5-19-69

Madison B-1 producing 138 B.O., 115 BW 12-1-68

Heath producing 10 B.O. 190 B.W. 7-7-77

WIRELINE, INC.
RADIOACTIVITY LOGGING
PERFORATING

Contract No. 3432

Operator

Rigman

Legal Description

Charge to

Invoice Address

City

Ship to (or well no.)

Address (or field)

County

VIA

State

Invoice No.

Invoice Date

Customer's Order No.

Date Shipped 7-25-63

District

Operating Base

TO WIRELINE, INC. In consideration of the furnishing of your _____ service herein set forth, the undersigned agrees as follows: to-wit:

The undersigned, hereinafter referred to as the customer, agrees to pay you the amount of your published prices for said services at your _____ office. Should the amount due be not paid within the term fixed by the invoice, interest at six percent, from the date of invoice, will be charged and if placed with attorney for collection, the undersigned agrees to pay attorney's fees of twenty per cent of the invoice amount or the minimum of $75.00.

The customer certifies that he is the owner of the well on which the work is to be done and that said well is in proper and suitable condition for the performance of said work and that all depth measurements shall be made under his supervision.

Because of the hazards existing in the performance of the work ordered, the customer agrees that you do not guarantee the results of your services, and that you are not to be held liable for injury to persons or property arising in the performance of said service.

The customer agrees to reimburse you for the reasonable value of any of your instruments, tools or equipment lost or damaged in the rendition of your service.

Customer agrees that the foregoing constitutes the entire agreement and that your employees have no authority to alter terms hereof.

To Be Paid By _____ (print correct name)

By _____ (signature of customer or authorized representative)

DESCRIPTION	PRICE	AMOUNT	TOTAL	A/C	COST
run _____ log					
as directed by Mr.					
Service Charge					
Depth Charge from Surface to _____ feet					
Logging Charge _____ feet					
Service Charge					
Type _____ perforate					
holes through casing at _____ holes per foot at the following depths as directed by Mr.					

5637
9
5628 Gk. - 13.

REMARKS	THRU TUBING	CASING	OPEN HOLE	
		5½		WTD 5644

TOOL	TYPE	SIZE Gun	SIZE Bullet	RUNS	LOADS	SHOTS	HOLES	MISSES D	MISSES G	MISSES L	MISSES C
PERF.											
				2							

I certify that the above ordered services and/or products have been received

(customer or authorized representative)

PRODUCTION & INJECTION DATA

	Initials	Date
Prepared by:		
Approved by:		

(9)

WELL EQUIPMENT INVENTORY

Equipment	Make	Type, Size and/or Description	Number or Feet	Value
Pumping Unit	EMSCO	D4-160 Serial #1[illegible]		
Electric Motor or Engine	Century	30 HP 3 phase 440V, Type K Serial # [illegible]		
Electrical Control (a)	GE	30 HP with time clock re-starter		
Tubing Head	[illegible] Rector			C
Casing Head	Rector			C
Tubing		2-7/8" EUE 8rd	2785'	
Rods	USI	8-3/4", 106 - 3/4"	2700'	
Casing		5-1/2" 14# J-55	5805'	N/A
Flow Line (b)		3" Steel Line Pipe	400'	D
Treater		(See Huber #1 Sheet)		
Heater				
Separator				
Tank (c)		(See Huber #1 Sheet)		
		Well Head		
Meters (d)				
Electrical System (e)	REA			

Buildings and Miscellaneous: (See Huber #1 Sheet)

Estimated Salvage Value: $750

NOTES:
(a) Including protective devices, time clock, etc.
(b) Including length, size and type.
(c) Including size, thickness, cone or flat bottomed, plain or galvanized.
(d) Gas or oil.
(e) If company owned, include transformers and equipment for electrical distribution system.

Lease & Well No.: Huber #3 Huber #3 — State: Montana

Field: East Poplar — County: Roosevelt

SAM 301